DEPARTMENT OF COMMERCE
UNITED STATES OF AMERICA

JUNE 9, 1975

Commerce Today

IMPROVING STATISTICS FOR BETTER MARKETING

FROM THE SECRETARY

Energy—The Key To Recovery

The signs have been as imperceptible as spring slipping into summer. Yet they are there, evidence of a modest nature to be sure, that the shadows of recession are being dispelled. It encourages a mood of cautious optimism after a winter of economic bleakness.

A consensus has formed in economic circles that a recovery will get under way in the second half of 1975. The recovery is expected to be moderate but stable and sustainable. What are the signs that point in this direction?

Inflation has moderated. It has not disappeared, but the rate of increase in prices has dropped sharply. There have even been some declines, particularly at the wholesale price level, in recent months. Funds are more readily available and at less cost for mortgage loans, the lifeblood of the homebuilding industry. Consumers will have increased purchasing power now that the tax rebate checks are being mailed out. The major part of a massive inventory liquidation, an essential precondition for renewed growth, is now behind us.

In general, evidence that conditions will improve in the months ahead is accumulating, leading economists to view their charts more sanguinely than in months past.

But even if these signs are accurate and a moderate upswing is on the way, there is little reason to relax, for there are a number of imponderables to consider. The long-run economic outlook depends not only on the monetary and fiscal policies adopted, but is also predicated on establishment of an effective energy program.

A rise in world-wide oil prices could undermine the anticipated business upswing. A recovery without a comprehensive national energy program is a fragile shell of hope. The energy program President Ford has proposed would insulate us eventually from another oil embargo; it would develop alternative sources of fuel to end our reliance on oil and natural gas; and it would step up our conservation of essential resources. Moreover, it would illuminate our path. For instance, automobile sales might very well be strengthened once the buying public knows approximately what the future cost of gasoline will be. An energy program that addresses itself to the controversial as well as conventional problems of supply and demand will greatly improve the climate for investment for electrical generation, for nuclear development, for off-shore and synthetic fuels exploration, and for even the more exotic forms of energy—solar, geothermal, and the harnessing of ocean currents.

The program is imperative if there is to be any long-range economic recovery. Moreover, adoption of a comprehensive energy program would substantially solidify our short-term gains, the outline of which our economic forecasters can now make out.

A number of signs point in the direction of recovery. But that is not enough, given the unpredictability of the energy equation. We must pave the way. It is essential that we have a national energy program and that we have it now.

Rogers CB Morton

Commerce Today

Vol. V, No. 18, June 9, 1975

U.S. DEPARTMENT
OF COMMERCE

ROGERS C. B. MORTON
Secretary

JOHN K. TABOR
Under Secretary

WILLIAM F. RHATICAN
Special Assistant to the Secretary for Public Affairs

THOMAS A. BELL
Director of Communications

RICHARD BALENTINE
Editor

CLARENCE M. ZENS
Associate Editor, International Commerce

ARTHUR McDERMOTT
Associate Editor, Domestic Business

AMERICO A. W. FAVALE
Graphics Coordinator

Staff Writers: ***Douglas F. Carroll, Felix Cotten, Margaret L. Hanson, Leslie Wilder.***

Published biweekly by the U.S. Department of Commerce, Washington, D.C. Annual subscription rate $29.80 ($7.45 additional for foreign mailing, $5.75 additional for domestic air mailing). Single copy $1.15. Make checks or money orders payable to Superintendent of Documents and mail to Superintendent, U.S. Government Printing Office, Washington, D.C. 20402, or to any U.S. Department of Commerce District Office.

All subscription inquiries and address changes should be sent to the Superintendent of Documents, at the above address. This is the central distribution agency for U.S. Government publications.
Microfiche copy available at $1.45 per issue from National Technical Information Service, Springfield, Virginia, 22151. Other inquiries should be sent to the U.S. Department of Commerce, 14th Street and Constitution Avenue, Washington, D.C. 20230.

Contents of this publication are not copyrighted unless indicated, and if not so indicated, the articles may be reproduced in part or in full without any prior consent. The Secretary of Commerce has determined that the publication of this periodical is necessary in the transaction of the public business required by law of this department. Use of funds for printing this periodical has been approved by the Director of the Office of Management and Budget through August 31, 1976.

2 Economic Highlights

Beef provides an example of an item whose price has moved more closely in line with specific industry conditions than with general economic conditions; large supply may prevent beef from exerting upward pressure on Consumer Price Index.

4 Newsmemo

5 Government And Business Are Working Together To Sharpen A Marketing Tool—Statistics

A group led by air carriers is teaming with Census Bureau officials and others to make export-import data more accurate and timely, for improved marketing use by U.S. firms.

7 Consumer Product Safety Act Seen Affecting Business Actions

It is unlawful for businessmen to manufacture, import, distribute, or sell any consumer product that does not meet an applicable Consumer Product Safety standard or that the Commission has declared a banned, hazardous product.

9 Incentive Program Pays Technology Bonus To American Industry

Begun in 1973, the Experimental Technology Incentives Program has come of age. It has committed $10 million this fiscal year to various cooperative projects.

11 Energy Management Digest

13 Domestic Business Report

Local assistance centers help minority contractors get more construction jobs—Shale oil powers Great Lakes ore ship in demonstration run—Firms told how to team up for energy R&D—Industry's role to be aired at noise conference—New indicator series seen giving better warning of economic changes—Industry's 1974 pollution control outlays fell below expectation—Industry Highlights: confectionery sales set record despite volume drop—U.S. fertility level hits record low, but population keeps rising—Ionosphere-altering technique holds communication promise.

21 International Commerce Report

Quarterly report on U.S. share of world's manufactured exports—Trade missions assess port equipment market in Iran and Pakistan, franchising opportunities in Japan—Reports from Commerce exhibitions in Sweden, Japan, Philippines—Economic trends in India, Bangladesh, Ethiopia—Calendar for world traders—Schedule of upcoming Commerce exhibitions abroad—Licensing, sales, construction opportunities around the world.

COVER: *A relatively new organization, the Foreign Trade Data Users Working Group, is concerned with the use and improvement of official U.S. foreign trade statistics by businessmen. Story on page 5 recounts the group's efforts to build greater cooperation between industry and government in this field, and thus take advantage, for one example, of the computer's faster pace with statistics.*

Large Beef Supply May Ease Upward Pressure On Consumer Price Index

Economic Highlights is prepared by James L. Pate, Assistant Secretary of Commerce for Economic Affairs.

While inflation has responded in recent months to the decline in economic activity, the changes in prices of some items have been more closely related to specific industry conditions. An example of a product that has frequently moved more or less independently of the general trend in prices is beef. Beef prices declined in 1974 while most other prices were increasing rapidly and are now on the rise again while other prices are continuing to moderate. Since wide movements in meat prices can influence the behavior of the major aggregate price indexes, it is worthwhile to look at this sector in some depth in order to evaluate our near-term price prospects.

A rise of 1.2 percent in retail meat prices in April, the first increase in seven months, was the main reason for an increase of 0.4 percent in retail food prices in April following declines of about the same magnitude in February and March. The discontinuation of the price declines in this area was also a major factor in the April acceleration of the Consumer Price Index (CPI). The wholesale price of beef has increased by 50 percent since early March following five consecutive months of decline. The potentially large slaughter this year, however, raises doubts about further sharp rises in cattle and beef prices.

Beef can be affected by the overall level of consumer demand but the supply is largely predetermined by a complex chain of events over a period of several years. Because of the immutable laws of biology, two to five years are needed to adjust output to changing conditions. Unlike most industries, beef production cannot be temporarily stopped for a month or two in order to adjust inventories to demand. Once production begins, it must continue and move into consumption with only limited adjustments for changing conditions that may arise during the long production process. Meat, unlike many other commodities, is difficult and expensive to store for long periods before use.

The cattle herd began to expand rapidly in the late 1950s (see Chart No. 1). This substantial growth can be attributed to the strong demand generated by an expanding economy, relatively cheap cattle feed and the rapid development of large commercial feeding enterprises, which grew in number and capacity as profits to cattle growers and feeders attracted capital into the industry. In the late 1960s and early 1970s it was a sellers market and the supply from the large commercial feed lots did not grow fast enough to meet demand. Feeder cattle prices nearly doubled between 1968 and 1973, while retail prices for meat rose about 163 percent and the CPI increased 28 percent.

This situation changed in 1973. Consumers boycotted meat because of the high prices, a hard winter set in, and feed prices rose rapidly. The government also imposed price controls at the wholesale and retail levels and consequently placements in feed lots slowed as cattle prices decreased. The industry delayed marketings as long as possible in anticipation of the removal of price controls. When controls were removed in the early fall, cattle came to the market in record numbers, prices tumbled, and the industry experienced heavy losses. From 1973 to 1974, the index for meat prices declined 14.2 percent and the CPI rose 9.3 percent.

A drought in 1973 added to the turmoil of the industry, spreading east and north and engulfing the major cattle-producing areas of the country and reducing feed supplies by 20 percent. The price of grain jumped to historic highs. Heavy marketings began in the early fall of 1973, continued through the winter and grew to record numbers in the summer and late fall of 1974. A record 9.4 million cattle were slaughtered between July and September last year only to be exceeded by another record 10.1 million head slaughtered in October through December. Slaughter in the last six months of 1974 was nearly 40 percent above the 1973 level. Slaughter of feeder calves increased to five times the 1973 level.

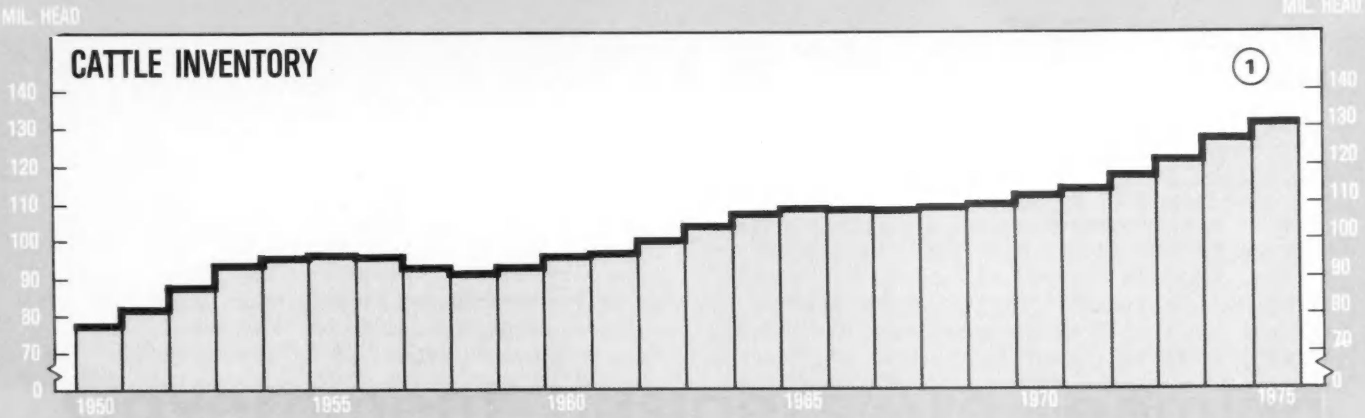
The cattle herd continued to increase despite the record slaughter of 40.5 million head in 1974. With the surge in slaughter and increase in the cattle herd, the prices for all classes of cattle fell sharply. The U.S. Department of Agriculture reported that the value of the cattle inventory fell from $41 billion on January 1 last year to $21 billion this year even though the herd increased 4 million head. The worsening conditions in the general economy undoubtedly accentuated the decline. This decline was also reflected in the behavior of the index for meat, poultry and fish, which declined by 2.4 percent during the year.

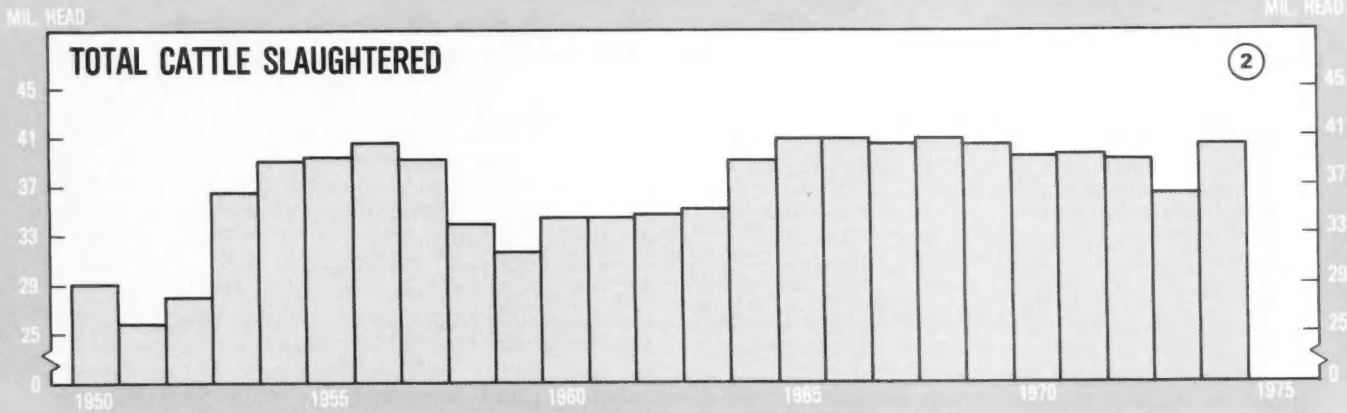
The large potential slaughter for 1975-76 can be illustrated by comparing the record 40.5 million cattle and calf slaughter in 1974 with the slaughter ten years ago. The number ten years ago was only one-half million less than the 1974 slaughter, but the herd totaled 97 million head, 35 million less than the present cattle herd. If we slaughter approximately 40 percent of the inventory this year, as we did in 1955 and again in 1965, the slaughter would total 53 million head, a 30 percent increase over 1974. This potential slaughter indicates how large the cattle herd is at present.

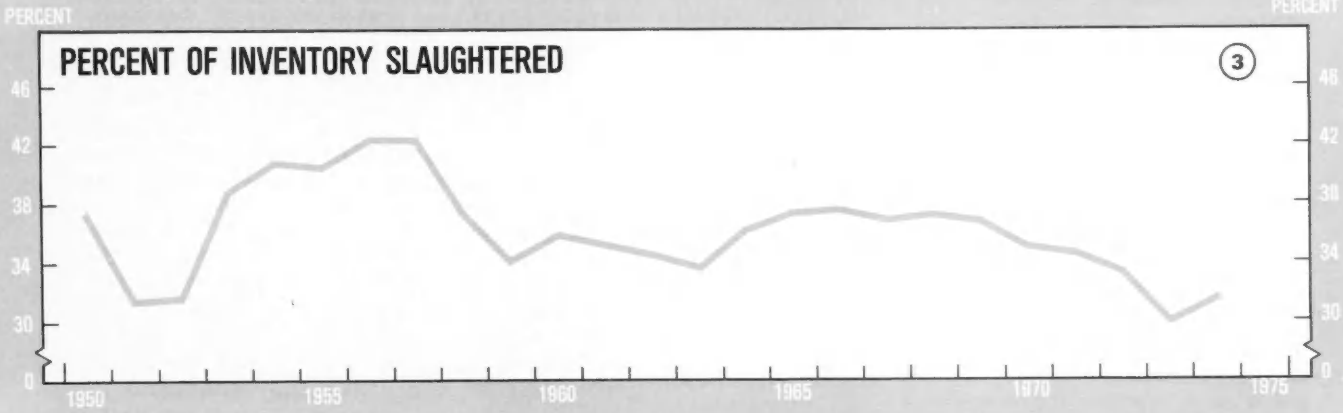
It is sometimes difficult for the layman to understand the short-term relationship between the price of feed and the price of beef. Last fall beef producers were financially squeezed by the unprecedentedly high cost of feed. When corn and grain prices were high last fall, it was not advisable to keep many animals and they were marketed as rapidly as possible. Increased marketings drove down prices. Now that corn and grain prices are lower, however, it is more attractive for cattlemen to hold their cattle. The result is a temporary rise in the price of beef. Thus, the latest rise in the price of beef is directly related to the lower price of feed.

Cattle prices and slaughter in the second half of this year are, of course, critically dependent upon weather conditions and prospects for the feed grain harvest. Excellent summer and fall growing conditions for crops and pastures could postpone cattle marketings, and cattle prices might therefore trend higher (especially if hog prices continue to rise) until the larger supply of heavier cattle arrive on the market in early 1976. The resulting large slaughter at that time would push prices down.

Alternatively, poor weather conditions on the range and pastures, coupled with a restricted grain harvest next fall, could force early marketings once again and dramatically lower cattle prices. With moderate weather and only a reasonably good grain harvest, the potentially large number of slaughter cattle available would

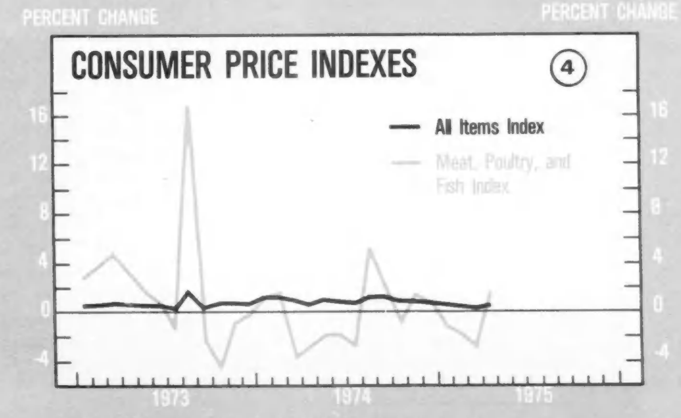






seem to preclude any prospect of a sustained uptrend in cattle prices.

In short, beef, a popular fixture in the American diet and an important component of the CPI, may be affected only marginally in the short run by the factors that influence the general trend of prices. Both the aggregate indexes and the price of beef may move in the same direction in the months ahead—but they will do so for widely different causes. Moreover, since the outlook for lower beef prices is favorable at this time, the expectation of further moderation in the CPI as the year progresses does not appear to be threatened by developments in this sector.



Data for Consumer Price Index are Seasonally Adjusted.

Newsmemo

A trans-Atlantic telephone call between two deaf persons? No problem for the exhibitors at a telecommunications equipment show held last month at the U.S. Trade Center in London. A British Member of Parliament "spoke" to a U.S. Government official in Washington through the use of teletypewriters connected to regular telephone lines by electronic devices called modems. The exhibitors involved are Applied Communications, Belmont, Calif., and Silent Communications, Oakland, Calif. Since their introduction in 1964, about 10,000 of the "teletypewriters for deaf people" have been placed in use in the U.S.

Consumers have both rights and responsibilities in regard to product information. HEW's consumer analyst Ezra Kohn told an apparel industry forum that the Federal Government believes consumers are due comprehensive information on safety, performance and general purchasing conditions for the things they buy, but that consumers themselves have an increased duty to stay fully informed. Kohn defines today's consumers as being highly concerned whenever they encounter waste and inefficiency in new products and as having increased expectations as to product satisfaction.

Consumer emphasis on energy-saving is seen in recent sales performance of microwave ovens. Unit sales of such ovens jumped 25 percent in the first quarter of 1975 over the comparable 1974 period, even while gas range sales were off 29 percent and electric ranges down 42 percent. Prices for microwave ovens vary from $260 to nearly $1,200. Total sales in the U.S. this year could reach 900,000, compared to 300,000 in 1972. Microwave ovens, with short cooking times, offer energy savings of up to 75 percent.

Here comes the solid state electronic watch. Consumers nibbled lightly at them in 1974—buying 750,000 while purchasing about 50 million watches in all—but the price picture is changing greatly. Three large U.S. semiconductor firms have announced plans to market such watches at retail prices around $50 or less. Previous price range was $85 to $300. The new prices will put the solid state electronic watch into competition with 80-90 percent of all watches sold in the U.S.

Purchasing agents for U.S. firms appear to be turning more to foreign suppliers. In less than two years the percentage of companies going abroad for at least some of their industrial supplies has risen from 21 to 45 percent. The firms responding with these figures to a Purchasing Magazine survey made some significant comments: "The integrity of delivery promises from foreign suppliers has to be experienced to be believed...There is a tremendous amount of R & D work going on worldwide in our product area...American suppliers are creating shortages and high prices which may force foreign buying."

U.S. changeover to metric measurement is inevitable, the American steel industry is convinced. Actions by steel's major consumers have led to this conclusion. Consequently the American Iron and Steel Institute is calling for the creation of a national metric conversion board and early formulation of a national metrication policy. The industry group wants conversion to be voluntary but done in a prompt, orderly and economical way. Meanwhile it has been working with metric coordination organizations and has developed its own metric practice guide.

Multinational corporations will face increasing criticism around the world. So believes Lee L. Morgan, president of Caterpillar, a highly visible target for such criticism. He laid out a counter-offensive for fellow corporation executives at the Chicago World Trade Conference: 1) act ethically, 2) conduct all business fully within the law, and 3) communicate effectively about the responsible contributions multinational companies make to the nations in which they operate. "The more of our own stories that are properly told, the more we will build the body of understanding and alternatives to some of the negative things being written...We have an obligation to refute the inaccurate portrayals of our goals and behavior."

Orthopedic surgeons will operate better, and patients getting replacement hip joints can expect more success with them. This is the upshot of recent testing work done at Commerce's National Bureau of Standards. A chemist and a physicist there have teamed with a surgeon to run exacting lab tests on the bone "cement"—poly (methyl methacrylate) —used in the prosthetic operations. The orthopedic specialists now have better data on variables of environment, temperature, humidity, handling times and techniques as they mix and use the cement in the operating room.

Commerce Today
Vol. V, No. 18
June 9, 1975

Government, Business Are Teaming To Hone A Market Tool—Statistics

A questioner in the audience had raised the obviously fundamental issue: "But can you justify this exercise to management today on a profit basis?"

There was no hesitation in the answer: "Absolutely. If management did not see profits in what we are doing, you can be sure that in today's conditions we would not be doing it."

The subject of this exchange was the use of—and improvement of—official U.S. foreign trade statistics by businessmen. Listening carefully was the director of the bureau that supplies a major part of these statistics. Moments earlier, he had introduced himself by stating his belief that "collecting information for information's sake is not very productive," and that his bureau is being directed not only to "do things right" but to "do the right things."

Here was industry and government in clear-cut agreement, with a shared opportunity to meet a well-defined goal. They could work together to build productivity and profits in American enterprises, and challenge each other to find the best ways to achieve this goal.

The businessmen quoted above are from the air cargo segment of the U.S. shipping community. The government speaker was Vincent P. Barabba, Director of Commerce Department's Bureau of the Census. The occasion was a Foreign Trade Data Users Conference, held recently in the World Trade Institute in the World Trade Center in New York.

The meeting was called by a relatively new organization that has participation from both industry and government, the Foreign Trade Data Users Working Group. Its membership, on the data users' side, includes representatives of the international air carriers, U.S. aircraft manufacturers, the Port Authority of New York and New Jersey, and others in the U.S. shipping industry; on the data suppliers' side, officials of the Census Bureau, Customs Service, Civil Aeronautics Board and the Department of Transportation.

This group recognizes that the formulation of useful foreign trade statistics begins at thousands of desks in factory shipping rooms and transportation agents' offices across the country. Here it is vital that employees make precise and complete entries on official documents. The process continues at hundreds of collection points, where careful verification of information and promptness in transmittal are important. The flow, now massive, funnels into government computers; here skilled editing and imputation are essential. In the final step, the data reaches its users, by computer tape, microfilm, photocopies or printed reports. The imperative is speed, against the perishability of the information, while preserving accuracy and completeness.

Among the principal users of this trade data are the major transport lines, both air and surface. For them the information is part of the basis for their forecasting, planning and marketing decisions. Manufacturing firms use the information in foreign marketing analysis, investment decisions and production planning. Airport and port authorities combine it with other information in their forecasting and planning activities. Government agencies and institutions follow a similar course.

Reports For Traders

Leonard R. Jackson, who heads the Census Bureau's Foreign Trade Division, described the wide variety of currently available export-import data:

"It ranges from overall totals to the most detailed figures on movements of individual commodities, cross-classified by country, port, method of transportation, and other statistical factors. In addition to our regular publications, reference tabulations, data tapes and microfilms, special outputs are prepared for individual subscribers for fees ranging from a few dollars to hundreds of thousands. A complete and up-to-date review of this information and how to obtain it is in our new "Guide to Foreign Trade Statistics: 1975," now at the press. The availability of this guide will be announced soon in *Commerce Today.*"

Taking an air carrier as an example, the availability of reliable export-import statistics offers assistance in growth analysis and forecasting, so that researchers can estimate such vital factors as industry share, modal share, carrier share and district market share. The figures also provide a competitive reading, in which commodity penetration by mode, the carrier's share of the air level and the monthly market performance can be gauged.

In commodity market research, the commodities that have the potential to be transported by air can be identified. Officials who must plan internal long-term capital commitments can use the figures in making facility forecasts and plans, in fleet planning and equipment utilization and in route case analysis.

In all of this decision-making, management is asking the marketing specialists: are the figures reliable? are they complete? are they timely? The marketers and forecasters pass these questions along, adding a number of their own. The stage is thus set for the establishment of a forum to discuss such questions. Enter the Foreign Trade Data Users Working Group.

The Working Group has had the U.S. air carriers as its prime mover. Formally established about two years ago, it continues a tradition of close cooperation between the air carriers and the Census Bureau's foreign trade officials that goes back about 20 years. Its chairman is Charles R. Kline, of McDonnell Douglas Corp., a company that among other things designs and builds cargo planes and accessories. Boeing is also represented, and, among the air carriers, Flying Tiger, TWA, PanAm, Seaboard, Eastern, Air

Canada and British Airways. Although there are no surface carriers now listed among the Group's constituent members, a number of representatives of the ocean shipping lines were in attendance at the recent New York meeting and contributed to the discussions.

One important initiative of the Data Users Working Group is an instructional program on the proper preparation and verification of the U.S. Shipper's Export Declaration. This is the document from which U.S. export statistics are compiled. The Working Group is emphasizing to all international air carriers, exporters, foreign freight forwarders and consolidators the importance, in particular, of two items on the export declaration: shipping weight and commodity identification. Without proper entries in these columns, it is pointed out, the data collection efforts of the Census Bureau's Foreign Trade Division cannot be fully accurate nor complete.

The Working Group, at its own expense, has developed and published a pair of how-to-do-it brochures that take shippers through the process of completing the export declaration. A presentation of both the right and wrong ways of completing the document makes the process crystal clear.

Census Bureau director Barabba said of this effort: "I singled it out recently before another audience not only as a good example of cooperation between the bureau and the air carriers and airframe manufacturers, but also as an example of cooperation among several federal agencies and concerned private organizations to improve reporting. I wish that all our users and potential users were as enlightened to the importance of accurate and meaningful data. And, more importantly, I wish they were as willing to help the bureau in the collection of information to the same extent as they are eager to acquire these important statistics."

In other efforts to improve the quality of U.S. foreign trade data, the Group is cooperating with the U.S. Customs Service in programs to enforce requirements for complete documentation on imported goods, and with the Census Bureau on instructions for shippers with regard to documentation procedures and requirements.

The Working Group is also concerned with improvements in foreign trade data processing, and has offered its advice and assistance to federal officials on revised procedures and maintenance programs for data editing and imputation.

Looking ahead, chairman Kline outlines a number of additional cooperative projects: "Possible courses of action in the future include efforts to include the true U.S. points of origin or destination in the foreign trade statistics, revision of the shipper's export declaration and the Customs entry forms, expansion of the maintenance program for data edit ranges and imputation factors, and improvements in the timeliness of statistics."

As to organization, the Group intends to remain at the compact working level, with some possible additions, Kline commented, from the economists and marketing specialists in the banking community.

Whatever the future course, the most important aspect will continue to be direct communication between government and industry, in which needs and problems can be handled in a give-and-take manner.

Census Bureau director Barabba emphasized this point in his appearance at the New York conference. He characterized the Working Group as a prime example of useful rapport between the bureau and its clientele. He called this link "almost a one-on-one relationship on a daily basis between the provider—the bureau's Foreign Trade Division—and the users represented in the audience."

As he has in many recent meetings with Census data users, Barabba told of a fifth test that the bureau is adding to its evaluation of the data it supplies. Traditionally, there have been four: accuracy, timeliness, completeness and relevancy. Today, he declared, the bureau is determined to meet an additional test: ease of use.

This can be a formidable challenge, in a time when a society of ever-growing complexity is churning out oceans of statistics. Barabba gave an indication of the publication tasks the bureau meets in keeping pace with this abundance. First, there are the figures themselves and the reports that pull them together. Then, there are the guides that the bureau publishes to locate the figures for potential users. Soon, he continued, the bureau will issue a guide to all the guides.

American businessmen are willing, even anxious, to venture into this maze. An example—admittedly exotic rather than typical—was put before the New York meeting by an air cargo marketing manager. Probing deeply into recent foreign trade statistics, his marketing team had noted an inviting pattern of traffic in tropical fish. The figures were put in the hands of the carrier's sales group. Now the line is flying tropical fish that bring cargo revenue in the six-figure range.

Toward A Provider-User Dialogue

Vincent P. Barabba, Director of the Census Bureau, explains a key element in his bureau's program to make its activities more useful to the public, not only in the foreign trade field but in all pursuits:

What we are trying to do is to accelerate the conversion of a bureau monologue into community dialogue through increased accent on any form of communication which will bring together the user and the provider—publications, meetings of various types, more work in the field, conference exhibitions—any means we can devise.

Part of our program to meet the needs of the data user calls for a more extensive effort in the various regions across the country, where most of the users are physically located. To this end we have developed a program of regional activities in six important areas.

First, our regional directors have been asked to plan a better response system to questions regarding the availability of census data, geographic reference materials, and related information. This would be in answer to questions coming to the bureau's offices in the field through telephone calls, letters and personal visits.

Second, we plan to strengthen our liaison with the various communities. This would include personal calls on state and local government agencies, college departments and community service organizations to explain census products. It would include talks before students and civic, business and professional organizations.

Third, we want to broaden our training efforts by providing seminars on the use of census publications, tapes, user guides, maps and other products. This would include seminars on highly specialized subjects such as the use of census data in transportation planning, housing studies and market research.

Fourth, we should serve as a clearinghouse for user activities. We will maintain a log of organizations which make meaningful use of census products. This will be used to develop links among users having similar interests, and give the bureau a list of contacts to learn more about the use of census data.

Fifth, we plan to develop case studies on the use of census data, based upon the observation of user activities.

And sixth, and very important, we want to evaluate the needs of the users and usability of census products, and feed this information to the appropriate divisions at the bureau.

Consumer Product Safety Act Seen Affecting Business Actions

The primary goal of the Consumer Product Safety Commission is the substantial reduction of injuries associated with consumer products. Created by Public Law 92-573, the Commission began operations in May 1973. The Act transferred to CPSC the responsibility for implementing several existing laws, specifically the Flammable Fabrics Act, the Federal Hazardous Substances Act, the Poison Prevention Packaging Act and the Refrigerator Safety Act.

Enactment of the Consumer Product Safety Act of 1972 was the culmination of more than a decade of accelerating interest in consumer product safety by the Congress and the public. The Law confers numerous authorities on the Commission to help marshal the resources of the consuming public, the business community and public agencies to reduce the risk of injury from consumer products. Since its establishment, the Commission's activities have had a significant impact on business practices concerned with product safety.

Consumer products covered by the Commission, in general, include any articles or components bought, consumed or enjoyed by a consumer, with certain exceptions such as food, autos, firearms and tobacco.

The Consumer Product Safety Act makes it unlawful for businessmen to manufacture, import, distribute, or sell any consumer product that does not meet an applicable Consumer Product Safety standard or that the Commission has declared a banned, hazardous product. A product declared an imminent hazard is liable to seizure, recall, repair, refund, or replacement under a court order, and manufacturers, importers, distributors, and retailers may be required by the court to notify known purchasers and the public of the product hazard.

Manufacturers and importers *must* fulfill these requirements of the Act:

I. Notify the Commission immediately if any consumer product is defective and could pose a substantial risk of injury regardless of whether the product is covered by a standard or other regulation;

II. Notify the Commission immediately if a product fails to meet a Consumer Product Safety rule;

III. Maintain and hold open to inspection by the Commission records and reports required by rule of the Commission relating to product safety and compliance with the Act;

IV. Permit agents of the Commission to inspect any factory, warehouse, or establishment where consumer products are made, held or transported. Manufacturers in foreign countries who export consumer products into the United States also must permit on-site inspection by Commission agents;

V. Issue certificates based on a test of each product or a reasonable testing program to accompany products subject to a Consumer Product Safety standard, stating that the product conforms to the applicable standards and specifying the appropriate standards.

In addition, distributors must comply with I, II, III, and IV; private labelers must observe III, IV and V; and retailers must observe I, II and IV.

The Commission *may* require manufacturers and importers to:

- Provide identifying information labels for any consumer product indicating the name of the manufacturer and the date and place of manufacture;
- Provide warning labels or other instructive labels judged necessary by the Commission to protect the public from unreasonable risks of injury;
- Provide technical data related to the performance and safety of products to the Commission and to prospective and first purchasers;
- Submit to the Commission a notice and description of certain new products prior to distribution;
- Abide by antistockpiling regulations

HUNTING CRACKS TO PREVENT CRACK-UPS—*A technical investigator at Commerce's National Bureau of Standards looks over a batch of front wheel bicycle forks he is inspecting under a cooperative program with the U.S. Consumer Product Safety Commission.*

for products for which safety standards have been promulgated but are not yet in effect;

- Inform the general public, any known purchasers, and others in the distribution chain of any product defect that could create a substantial hazard and replace or repair the product or refund the purchase price;
- Reimburse any other manufacturer, distributor, or retailer for costs incurred in complying with a Commission order.

The Commission *may* require distributors and retailers to comply with six and seven, and private labelers may be required to observe numbers one and two.

Both civil and criminal

The Consumer Product Safety Act includes provisions for both civil and criminal penalties. Knowing violations can bring civil penalties of $2,000 for each violation up to a maximum of $500,000. Criminal penalties for knowing and willful violation following notice of noncompliance hold a maximum fine of $50,000 and one year in jail.

The Commission is advised by a 15-member council that includes five representatives from government agencies, five from consumer product industries, and five from among consumer organizations, community groups, or recognized consumer leaders. The Commission also has two other advisory committees: The National Advisory Committee for the Flammable Fabrics Act and the Poison Prevention Packaging Technical Advisory Committee.

One of the major tasks of the Commission is to issue mandatory safety standards for consumer products which may pose risks. Anyone may submit to the Commission an existing voluntary standard for adoption as a proposed mandatory standard, and any interested and technically competent party may offer to develop a proposed standard. This opportunity is not limited to industry representatives—consumers or consumer organizations may do so. If no qualified standards are proposed, the Commission may develop its own.

Once a proposed standard is published, any interested person may comment on the proposal and have opportunity for oral presentation. After consideration of the comments, the Commission, under the Consumer Product Safety Act, can issue a mandatory safety standard. Anyone may request judicial review of the standard within 60 days.

The Commission believes it can best achieve its objective of reducing injuries by dealing first with those products which pose the greatest risk of injury to the public. In setting its priorities, which will be periodically re-evaluated, it takes into consideration the number of injuries associated with a particular product, the severity of those injuries, the consumers' likelihood of exposure to the product and any other factors it considers important. The Commission has published a *Consumer Product Hazard Index*, which gives an overall ranking of products based on the frequency and severity of accidents in which they are involved. This list serves as an essential component of the Commission's priority setting system. When emergencies arise, such as imminent hazards, notifications of particularly hazardous product defects are given immediate attention.

The regulatory and compliance tools the Commission uses are chosen in specific cases to best match the magnitude and type of hazard associated with the product. These include bans, mandatory safety standards, encouragement of voluntary action, consumer education, seizure and imposing penalties for violation.

CPSC inherited from the Food and Drug Administration, which had previously exercised responsibility for portions of three of the acts transferred to CPSC jurisdiction by the new law, an injury compilation method called the National Electronic Injury Surveillance System. NEISS data comes from 119 hospital emergency rooms selected from over 5,000 such facilities in the United States, giving a statistical sample of hospital emergency room treatment. Coded data from these 119 hospital emergency rooms are recorded by computer daily and tabulated to show which products are associated with injuries.

The Commission selects cases from these tabulations for in-depth examination by field investigators to determine the details of how the product was involved and the course of events which resulted in injury. The data generated by NEISS give the Commission the basic information for developing a product hazard index.

CPSC also utilizes other reporting systems in making judgments on priorities and regulatory actions.

Consumer Product Safety Commission Area Offices

Atlanta:
1330 West Peachtree St. NW.
Atlanta, Ga. 30309
404-527-2231

Boston:
408 Atlantic Ave.
Boston, Mass. 02110
617-223-5576

Chicago:
1 North Wacker Dr.
5th Floor
Chicago, Ill. 60606
312-353-8260

Cleveland:
DEB Annex
21046 Brookpark Rd.
Cleveland, Ohio 44135
216-522-3886

Dallas:
Room 410C, 500 South Ervay
P.O. Box 15035
Dallas, Tex. 75201
214-749-3871

Denver:
Suite 938, Guaranty Bank Bldg.
817 17th St.
Denver, Colo. 80202
303-837-2904

Kansas City:
Suite 1500, Traders Natl. Bank Bldg.
1125 Grand Ave.
Kansas City, Mo. 64106
816-374-2034

Los Angeles:
Suite 1100
3660 Wilshire Blvd.
Los Angeles, Calif. 90010
213-688-7272

Minneapolis:
Room 650, Federal Bldg.
Fort Snelling
Twin Cities, Minn. 55111
612-725-3424

New Orleans:
Suite 414, International Trade Mart
2 Canal St.
New Orleans, La. 70130
504-527-2102

New York:
#6 World Trade Center
6th Floor
New York, N.Y. 10048
212-264-1134

Philadelphia:
Continental Bldg., 10th Floor
400 Market St.
Philadelphia, Pa. 19106
215-597-9105

San Francisco
160 Pine St.
San Francisco, Calif. 94111
415-556-1816

Seattle:
1131 Federal Bldg.
909 First Ave.
Seattle, Wash. 98104
206-442-5276

Interested organizations and individuals should direct any questions concerning consumer product safety to the nearest area office.

Incentive Program Pays Technology Bonus To American Industry

A cooperative working arrangement is under way between a small technical group in Commerce's National Bureau of Standards and various governmental agencies which is proving of major value to government, business, the taxpayer, and the economy. Benefits range from saving energy to streamlining governmental regulatory processes.

The NBS group is the Experimental Technology Incentives Program (ETIP), which got under way in 1973, when it was created by Presidential mandate.

ETIP has now come of age. It has moved from the planning and organizing stage into the arena of action, and by the end of the current fiscal year will have committed $10 million to cooperative projects with other government agencies, including state and local, and to policy studies. ETIP is divided into four broad policy areas: procurement, regulation, civilian research and development, and assistance to small, technology-dependent firms. More than 50 projects have been initiated in these program areas.

Procurement

In procurement, ETIP works with the Federal Government, the largest single purchasers of goods in the country. It provides staff and resources to help the Federal Supply Service, which is part of the General Services Administration (GSA), develop and implement new procurement methods that give incentives to suppliers to innovate. Thus far, the group has worked with the Federal Supply Service in new procurement experiments leading to the purchase of more than $14 million worth of energy-saving air conditioners, kitchen ranges, hot-water heaters, and refrigerator-freezers.

These items were purchased under the life-cycle-costing concept (LCC), under which lifetime ownership costs, rather than lowest initial purchase price, are given the greatest weight.

Traditional government buying practice has emphasized the lowest purchase price, which usually has meant older or existing technology. However, it is now realized that the massiveness of government purchasing could allow it to lead the market, and thereby reduce market entry risks for new products while obtaining greater value for the taxpayer's dollar. In this way, the government can give a boost to desirable technological change.

Under the LCC concept, the Federal Government is now buying more efficient air conditioners—the models that are being purchased use approximately 21 percent less energy than models purchased last year.

Some 27,000 air conditioning units are expected to be ordered through the Federal Supply Service between November 1, 1974, and October 31, 1975. Government users will save about $400,000, based on current utility rates, over their seven-year expected lifetime. The avoidance of excessive operating costs has resulted in a net saving although a GSA analysis showed that the new, more efficient units cost 39 percent more to buy than the units purchased last year.

The air conditioner contract was valued at about $6.5 million. It marked the first time that GSA had used life cycle costing. Six manufacturers entered the bidding. General Electric received more than $2.5 million of the award, Fedders Corporation $3.9 million. The Fedders contract was the first time that an air conditioner manufacturer had offered models to the Government suitable for a particular combination of humidity, temperature, and other conditions peculiar to the region where the air conditioner would be used.

The Federal Supply Service has contracted for an estimated 7,700 home hot water heaters from the A. O. Smith Corp. of Kankakee, Ill., of which about 6,100 are gas heaters and 1,600 electric. These water heaters use 11 percent less energy than other heaters offered for sale to the government, due to more efficient heating units and better insulation.

ETIP and the Federal Supply Service report that the heaters promise a net lifetime saving of about $300,000 over competing models. A. O. Smith officials told ETIP that the company had formerly sold the gas water heaters mainly in France, where energy costs have always been higher than in the United States. G. A. Buckman, product manager for A. O. Smith, says the company will begin marketing the heaters commercially in the United States this summer as a result of winning the federal contract.

Dr. Jordan D. Lewis, ETIP director, says the contract award demonstrates the ability of American industry to respond effectively to a government market for innovative technology. With the assistance of "seed money" from ETIP, the Federal Supply Service asked manufacturers to compete for the hot water heater contract on the basis of the life-cycle cost of the water heaters.

Because the hot-water heaters are better designed and insulated than those the government bought in the past, Dr. Lewis says less natural gas and electricity will be required to maintain acceptable water temperatures. He explains that the increased efficiency of the insulation, burners, and electric heating elements in the heaters will help the government conserve energy and reduce its fuel bill.

Ready for tests

ETIP and the Public Building Service are developing a life-cycle costing methodology for general use in planning and acquiring federal office space. This model will be tested for the first time this summer in three different space requirement situations, and when refined is expected to help in predicting building obsolescence, in making rent - versus - construction-versus-renovation decisions, and in evaluating contractor bids. The Public Building Service expects to apply this model to much of their $2 billion annual volume.

Another government purchasing innovation which ETIP helped facilitate features value-incentive-clauses (VIC) which the GSA now requires to be included in all contracts by which the Federal Supply Service purchases supplies and equipment designed to federal or military specifications and in amounts exceeding $100,000.

The value-incentive-clause encourages GSA contractors to produce more cost-effective products, including the use of new technology, because they and their subcontractors share directly in any net savings to the government. Generally, GSA expects to divide the savings evenly between the government and the contractor. The potential involved is considerable, since the Federal Supply Service buys approximately $2 billion of supplies and equipment each year.

The value incentive clause also specifies that, when a savings technique comes from a subcontractor, the contractor's share will be divided evenly between the prime contractor and the subcontractor.

In order to facilitate the use of life-cycle costing and value-incentive clauses in the Federal Supply Service, ETIP has helped develop training courses in these subjects, the first series of which has already been taught. ETIP also is helping the Federal Supply Service develop systematic procedures for assessing user needs, and translating these into appropriate specifications.

Top health customer

The Veterans Administration's annual purchases of medical goods make it the largest single buyer of health care equipment and supplies in the United States. After a year of intensive planning, the VA and ETIP are launching a series of procument experiments involving several dozen different products and the formation of an experimental procurement function within the Testing and Evaluation Division of the VA supply service.

The VA experiments although similar to those of the Federal Supply Service will provide data on the owner-user group of purchasers, the use of new technology in a service-oriented agency and the ability of industry to innovate in areas of high reliability, safety, and other health-related criteria.

The experiments wil include establishment of an active system to identify and screen new products for inclusion in VA purchasing plans, and to identify emerging medical technologies whose commercialization can be encouraged by a guaranteed initial sale.

In cooperation with the Council of State Governments and the National Association of State Purchasing Officials, ETIP also has established an experimental program aimed at eliminating duplication of effort in specification and test-method development, increasing the use of life-cycle costing and performance specifications, eliminating ordinances requiring the acceptance of lowest-cost bids, and developing and using consensus standards, specifications and test methods.

Four regional meetings of state purchasing officials have been held, and a long list of products for experimentation has been developed. A similar experiment dealing with local governments will be initiated. Together, state and local governments purchase about $100 billion worth of goods each year.

In the area of regulation, ETIP is seeking to accelerate and improve the quality of regulatory standards development, in order to reduce uncertainties and delays in the regulatory process. It also advocates: increased codification to facilitate the meeting of certification requirements; design rates and rate structures which are more reflective of the current economic needs of the market place; and improving the definition of "envelope" boundaries to afford business maximum freedom of operation within allowable limits.

Results, not structure

ETIP maintains that much of the assault on economic regulation is based on the uneconomic results following from it, rather than from its inherent structure. A considerable amount of these troubles, it adds, arises from the inability of the regulatory process to examine in detail the cost structure of the industry under regulation, resulting in the costs and benefits becoming so dislocated that the entire system becomes highly inefficient.

ETIP is experimenting with the transportation of fresh fruits and vegetables from the western growing regions to the eastern markets. The experiment will generate extensive information about the growing, processing, transportation, distribution and marketing of fresh fruits and vegetables, to determine the costs and benefits of various systems. The information will be used in proceedings before the Interstate Commerce Commission, probably in the fall of 1976.

To help smooth out the regulatory process ETIP is working with several regulatory agencies: Nuclear Regulatory Commission and the American National Standards Institute, the Occupational Safety and Health Administration, the Environmental Protection Agency, the Federal Power Commission, and the Food and Drug Administration.

For example, ETIP has helped the Nuclear Regulatory Commission design and conduct experiments which appear to demonstrate that the time needed to write draft standards for nuclear power plants can be reduced from one year or longer to one month or less. Two such standards—the evaluation of man-made and natural hazards at proposed reactor sites and the criteria for evaluating the qualifications of power plant operators—have received draft approval and now await final approval. If the final evaluation proves out, the implications for the regulatory process could be tremendous.

Rate-setting processes

Four state public utility commissions have been selected for experiments applying computerized data and analysis techniques to improve utility rate-setting processes and regulatory policies. The experiments will focus on reducing "regulatory mation, analyses of company rate structures, surveillance of company rates and performances, and analyses of new utility plant forecasts, utility company performance and long-range economic planning. Dr. Lewis says the results of the Utility Commission experiments should help pave the way for reducing capital investment problems of electric utilities and will indicate new ways to improve the regulatory process in other ways besides the ones selected. "The energy shortage has put tremendous pressures on both government and utilities to improve performance," he adds.

In the field of private research and development, ETIP is interested primarily in federally-sponsored applied research and development intended to lead to the development of manufactured goods for sale to non-federal users.

In one project, ETIP solicited proposals for research on cotton-polyester flammability. ETIP departed from the conventional practice whereby the government agency specifies in some detail the work to be done and then evaluates potential contractors on the basis of their technical qualification. ETIP stated in its solicitation that technical competence would be used to screen prospective contractors but that primary selection emphasis would be placed on (1) the market-economic rationale presented for the choice of the specific problem to be addressed by the contractor, and (2) the contractor's plan to pursue early commercialization of the research results. ETIP's approach in this case caused the creation of a consortium of yarn and textile manufacturers, chemical producers, universities, and government and independent laboratories. After nine montss, a broad scientific basis for the development of specific commercially viable chemical treatments has been established, and several promising approaches are under investigation.

Small business concerns

Regarding smaller businesses, ETIP is interested in two categories: the availability of capital for small technology-based firms, and disproportionate regulatory compliance costs for such firms.

ETIP has programmed $300,000 of its funds to support a unique experiment at the state level in new product research, development, and marketing. Thus far, $97,000 has been transferred to the Connecticut Product Development Corporation to test the effectiveness of a new mechanism for encouraging state, local, or regional research and development in product innovation. The corporation is designed to be self-sustaining. Its income will derive from royalties from sale of the products it has helped develop. It is modeled roughly after several corporations in the United Kingdom and other countries.

Energy Management Digest

FROM TRASH TO ENERGY...The announcement that Wheelabrator-Frye Inc. has signed a 25-year contract to supply Jersey Central Power and Light Co. with nearly a billion kilowatt hours of electricity a year from a generating plant that will convert refuse into energy "is another step forward in developing alternative sources of power generation to make this nation more energy independent," says Commerce Secretary Rogers C. B. Morton. "Such innovative techniques will also help us to alleviate the mounting problem of solid waste disposal. This project, in which no public funds are involved, demonstrates that such waste conversion methods are economically feasible. The new $66 million refuse-to-energy plant, which is to be built with a number of air pollution control safeguards, will also enable its operators to recover the metal residue left from the conversion process and recycle it."

REMEMBER THE KIDS...A new television public service campaign designed to build wider understanding of America's real energy problems was unveiled recently by Federal Energy Administrator Frank G. Zarb. The first in a series of television spots built around the theme "Energy Conservation Now" is already available for broadcast under auspices of the Advertising Council, a nonprofit industry association. Featuring a nine-year-old New Jersey schoolboy, Keith Blanchard, the spot urges adults to conserve energy for future generations if not for their own, and makes specific suggestions.

COMPATIBLE VALVES...The Energy Research and Development Administration has requested proposals for the design, development, testing and evaluation of valves to be compatible with operating conditions encountered in various coal gasification plants. If a contract is awarded, it would cover three phases: conceptual design and analysis, prototype testing, and pilot plant testing. Valves are to be developed for use in four systems: feed systems, char and ash removal systems, slurry discharge systems, and valves between injection hopper and gasifier.

GEOTHERMAL ROUNDUP...ERDA has published a bibliography of the scientific and technical information available on geothermal resources. The document contains citations of 3,890 information items published since 1904, covering site geology, hydrology, meteorology, geothermal power plants, environmental aspects, and energy use, among others. The bibliography is available from Commerce's National Technical Information Service, Springfield,Va. 22161, for $10.60 per paper copy and $2.25 for microfiche. Ask for TID-3354, "A Bibliography of Geothermal Resources Exploration and Exploitation."

OPTING FOR EFFICIENCY...The Federal Energy Administration is trying to find out how to encourage more inter-city travelers to choose the most energy-efficient form of transportation. Substantial energy savings could result if more people used buses and trains to travel between cities, rather than driving alone or flying. Under the terms of a $100,000 FEA contract, the Aerospace Corp. of El Segundo, California, is applying a computer model to study the main factors influencing the choice of transportation mode by people traveling between cities in the Northeast Corridor (Boston-New York-Washington) and the California Corridor (San Francisco-Los Angeles-San Diego). The computer allows researchers to evaluate the relationships between such factors as cost, travel time, travel demand, and socio-economic characteristics of riders.

INHERIT THE WINDMILL...ERDA has awarded contracts of about $500,000 each to the Lockheed-California Co. and the General Electric Space Division for independent studies to assess the potential for wind energy conversion systems across the varied U.S. geographical areas and the economics and utility of wind turbines. The studies will also cover the most likely uses of wind machines; the kind, size, number and costs of the systems required; potential energy storage systems, and the possible impacts of large-scale use of wind energy systems.

HELP FOR INTERVENORS?...The Nuclear Regulatory Commission has selected the Washington, D.C. firm of Boasberg, Hewes, Klores and Kass to study the issues raised by requests that the Commission provide financial assistance to intervenors in NRC licensing cases and other procedures. The study will address such questions as: What kinds of expenses would qualify—experts' fees, attorney's fees, other expenses? Should assistance be given before or after the intervenor's presentation? Should aid go to more than one intervenor in the same proceeding? What would be the maximum limits of such assistance? Given limited availability of funds, how should they be allocated? What kinds of proceedings should be covered? Are there better methods than direct financial assistance, such as establishing a Public Counsel in the agency?

USING NUCLEAR HEAT...The Energy Research and Development Administration is studying the possible use of nuclear reactor heat for such industrial processes as steel production, petroleum refining, and conversion of coal to synthetic fuels. A very high temperature reactor would be needed to produce the necessary process heat of up to 2000° F. Conceptual designs for such reactors have been developed for ERDA by General Atomic, General Electric and Westinghouse. Companion studies on the industrial processes which would employ the heat are being performed by NASA, the American Iron & Steel Institute, and the Los Alamos Scientific Laboratory. ERDA's Holifield National Laboratory will assess the results of the study, which will include a cost-benefit analysis.

FRINGE BENEFIT...President Ford's energy program will generally improve the environment because it stresses energy conservation, FEA reports in a draft Environmental Impact Statement. Prepared with other federal agencies, the statement weighs the impact of 13 parts of the Energy Independence Act and related tax proposals. The 390-page report is available from FEA's Office of Communications and Public Affairs, Administrative Operations & Distribution, Room 222, Old Post Office Building, 12th and Pennsylvania Ave. NW., Washington, D.C. 20461. One copy per organization.

NEW ORLEANS JOINS...The City of New Orleans has become the fifth city to participate in FEA's voluntary homeowner energy conservation education program known as "Operation Button-Up," initiated last November to promote homeowner energy conservation. Other participants are Louisville, Indianapolis, Kansas City, Kan., and the Minneapolis-St. Paul metropolitan area. Federal funds ranging from $25,000 to $45,000 are provided to help the cities develop public education programs to meet their specific needs, and to administer them. The New Orleans program is being administered by that city's Office of Consumer Affairs. This program will be a particularly interesting one to analyze interested parties say, because, unlike the other cities in the program, the cooling season is more energy-consuming than the heating season.

POWERPLANT RELIABILITY...The Federal Energy Administration is making available a final report on the reliability of fossil-fired and nuclear powerplants. Administrator Frank Zarb, in releasing the report, said, "The electric power industry has maintained an excellent record of reliable service to consumers but productivity of large-coal-fired and nuclear plants can and should be improved." The report concludes that improvements in the productivity of fossil-fired and nuclear powerplants could help reduce U.S. dependence on foreign oil imports, and could also significantly reduce the impact that increasing capital requirements and fuel costs are having on consumer electric bills. Copies of "A Report on Improving the Productivity of Electric Powerplants," are on sale at the U.S. Government Printing Ofice, Washington, D.C. 20402, for $1.55 a copy, prepaid. The stock number is 041-018-0056-9.

CHECKUPS CAN SAVE...The head of an automobile replacement parts firm has announced that he is leading an industry-wide effort aimed at making automobile inspection mandatory on a nationwide basis. Maremont Corporation's Richard D. Abelson says "I am convinced that mandatory vehicle inspection, combined with strict enforcement of the 55-mile-per-hour speed limit, re-timing of lights to improve traffic flow, and permission to turn right on red lights will save as much as a million barrels of oil per day." He said that additional savings in fuel will be achieved as car factories turn to production of smaller, lighter-weight, more-efficient vehicles. Together, these savings should achieve the nation's fuel-economy goal, he said. Another industry spokesman, Don Prieto of the Automotive Parts and Accessories Assn., has proposed a tax deduction for motorists who make a cash investment in fuel efficiency improvements after their car has left the dealer. Prieto would apply the deduction much the same way as the proposed incentives for home improvements that result in fuel savings.

SHIFTING SANDS...Anyone who has walked on an ocean beach knows that the water constantly alters the sandy bottom near the shore. Similar water/sand interactions take place in the deeper water offshore. An understanding of such interactions is important to the design of offshore structures and to the protection of the shoreline. ERDA has awarded a $135,800 contract to the Westinghouse Ocean Research Laboratory of Annapolis, Md., to measure and analyze these interactions. Knowing how the ocean floor responds to wave and current will help designers plan more stable offshore derricks or power plants, for instance.

DOMESTIC BUSINESS REPORT

Local Assistance Centers Help Minority Contractors Get More Construction Jobs

Minority contractors are able to compete more effectively for U.S. construction contracts as a result of a major campaign mounted by Commerce's Office of Minority Business Enterprise.

OMBE has funded a network of nonprofit Construction Contractor Assistance Centers around the country. These locally-based organizations offer minority contractors technical and management assistance in estimating, successful bidding, internal bookkeeping, bonding requirements, licensing and other aspects of contracting operations.

"Traditionally, minority contractors have been excluded from major construction contracts by the intricacies of bidding techniques, bonding and insurance costs, and financing," according to OMBE Director Alex Armendaris.

An example of what a successful CCAC can do is New Jersey's Contractors Training Development Office (CTDO), which has helped minority contractors secure more than $112 million in construction contracts in New York and New Jersey since it was first funded by OMBE in 1970.

Rendered as needed

CTDO's black executive director, Gurney Nelson, a civil engineer, heads a multiracial staff of 35 architects, engineers, accountants and semitechnical personnel, at offices in New York City, Rochester, Buffalo, Westchester County (N.Y.) and Newark, N.J. The office services some 200 contractors with all types of managerial and technical assistance rendered as needed to get contracts. Any contractor who secures work through CTDO is followed up to assure he does a satisfactory job.

When a minority construction contractor — masonry, carpentry, brickwork, paving, painting or other specialty — comes to CTDO for assistance, Nelson's staff puts the prospective client through a rigorous assessment procedure asking such questions as: Does the client have the proper license, legally required registrations, federal tax number, sales tax registration? How is his cash flow, his credit, his bookkeeping, his bonding, his relationship with his bank? What kind of contract is he set to perform? What is the scope of his capability?

According to Nelson, "We don't offer management and technical assistance on an educational basis; after we match up a contractor with a job, then, if he's weak at estimating, we'll teach him that, or provide him with an estimator. If he's weak in accounting, we'll get him an accountant. Whatever it takes to set him up for a particular job . . . financing, bonding included . . . we work with him."

Nelson, an Ohio State engineering graduate, was chosen to head the Contractors Training Development Office in 1968, when it was funded by the State of New Jersey Department of Community Affairs. His organization was so successful in New Jersey that the New York State Urban Development Corporation tried them out on recruiting and referring minority contractors for a state housing project in Brooklyn. Nelson and his staff located and referred minority contractors for the first phase of the housing project. Three million dollars out of a total of $15 million went to minority contractors. Since then, CTDO has expanded to the five offices currently in operation.

Nelson attributes the success of his operation partly to the fact that it deals directly with the owners. For instance, his office worked directly with IBM on policy toward minority contractors in its company construction operations.

Such service to the builder gives the OMBE-funded Construction Contractor Assistance Center a voice in the owner's construction planning process, and allows it advance notice on minority business opportunities, not only in construction but in providing other minority-owned services such as building guards, landscaping, concessions and office supplies.

Says Nelson, "We don't want owners to set aside work for minority contractors. We don't want giveaways to our contractors. What we want is an opportunity for the minority contractor to compete on an equal basis.

Together with other CCAC's the Contractors Training Development Office hopes to infuse new life into minority contracting in the United States.

MINORITY CONTRACTOR ASSISTANCE—*Director Gurney Nelson (2nd from right) consults with associates at OMBE-funded Contractors Training Development Office in New York City, one of a nation-wide network of organizations helping minority contractors.*

Solar Industry Holds First Major Convention, Hears Cautionary Note

While the world was discussing what to do about the energy crisis, America's solar energy industry quietly grew to the stage where it could sponsor its first international exhibit. The Solar Energy Industries Association (SEIA), assisted by several concerned U.S. Government agencies, hosted the first International Solar Industry Expo May 27-29 in Washington, D.C.

Besides giving the industry a chance to flex its fledgling muscles, the Expo brought together several hundred manufacturers, scientists and researchers, and government policymakers to assess just where the industry is and where it's going.

Six areas of solar energy application provided the focus for these discussions: heating and cooling, bioconversion (utilization of solar energy captured by plants and crops), ocean thermal, photovoltaic (development of solar cells), thermal electric, and wind.

Speakers included Mrs. Virginia Knauer, Special Assistant to the President for Consumer Affairs, speaking on the topic of public acceptance of solar systems, and Michael H. Moskow, Assistant Secretary for Policy Development and Research in the Department of Housing and Urban Development. Mr. Moskow discussed current demonstration projects sponsored by HUD.

Mrs. Knauer told the attendees that solar energy has a powerful potential to help solve the nation's energy problems, if consumer confidence is not damaged by inferior products and exaggerated claims.

She said that, if developed to its full potential, solar energy could provide drastically lower energy bills, a clean and inexhaustible source of power, and a major contribution toward the United States' goal of energy independence.

Performance is key

The industry's success will be determined by what develops in four main categories, according to Mrs. Knauer: state and federal government participation; institutional roadblocks; consumer confidence; and the integrity of solar energy manufactures. Specifically on the latter two points she mentioned adverse effects of unpleasing appearance, sloppy construction, and poor performance and durability. The public will be turned-off to the whole concept of solar energy, she predicted, if the products do not live up to expectation.

The final day of the Expo was given over to panel discussions of the Heating and Cooling Demonstration Act with special attention to residential and commercial demonstrations, institutional constraints and standards and performance monitoring/reporting.

Throughout the Expo, a Trade and Consumer Exhibition provided the opportunity to examine the hardware currently available from manufacturers, as well as to see some working models of solar-powered devices.

Persons interested in further information on the proceedings should contact the Solar Energy Industries Association at 1001 Connecticut Ave. N.W., Washington, D.C. 20036 (202-293-1000).

What's What In Solar

A sampling of solar energy reports available from the National Technical Information Service are listed below. Prices quoted are for paper copies; all except the General Electric report are also available in microfiche for $2.25 apiece, unless noted otherwise.

Solar Energy Proof of Concept Experiments (PB-231 144/CZ). Mitre Corp., McLean, Va., Dec. 1973, 106pp. PC $5.25/MF $2.25.

Solar Energy (AD-778 846/CZ). Informatics Inc., Rockville, Md., March 1974, 478pp. $12.

The Development of a Solar-Powered Residential Heating and Cooling System (N74-26504/CZ). National Aeronautics and Space Administration, Marshall Space Flight Center, Huntsville, Ala. May 1974. 79pp. $4.75.

Solar Heating and Cooling of Buildings, Phase O; Feasibility and Planning Study, Final Report (PB-235 430-SET/CZ). General Electric Co., Philadelphia, Pa., Space Div. May 1974. 5-volume set, $42 domestic/$54 foreign.

A Universal Solar Kitchen (PB-213 023/CZ). Johns Hopkins Univ., Silver Spring, Md. July 1972. 27pp. $3.75.

Solar Community: Energy for Residential Heating, Cooling and Electric Power (SLA-74-91/CZ). Sandia Labs, Albuquerque, N. Mex. Feb. 1974. 18pp. $3.

Solar Powered Steam Supplement for the BNL Steam Plant (BNL-18734/CZ). Brookhaven National Lab, Upton, N.Y. March 1974. 26pp. $4.50.

The Utilization of Solar Energy to Help Meet Our Nation's Energy Needs (N73-22748/CZ). National Aeronautics and Space Administration, Lewis Research Center, Cleveland, Ohio. 1973. 73pp. $3.75.

An Assessment of Solar Energy as a National Energy Resource (PB-221 659/CZ). U. of Maryland, Dept. of Mechanical Engineering, College Park, Md. Dec. 1972. 85pp. $4.75.

Solar Energy Power System (N74-14496/CZ). National Aeronautics and Space Administration, Marshall Space Flight Center, Huntsville, Ala. Dec. 1973. 18pp. $3.25.

Solar Thermal Electric Power Systems (PB-231 115/CZ). Colorado State Univ., Fort Collins, Colo. Jan. 1974. 288pp. $8.75.

Effective Utilization of Solar Energy to Produce Clean Fuel (PB-233 956/CZ). Stanford Research Inst., Menlo Park, Calif. June 1974. 164pp. $6.25.

Development of Solar Engineering in the USSR (AD-784 708/CZ). Foreign Technology Div., Wright-Patterson AFB, Ohio. July 1974. 15pp. $3.25.

Solar Sea Power (PB-235 469/CZ). Carnegie-Mellon Univ., Pittsburgh, Pa. April 1974. 89pp. $4.75.

Solar Heating and Air Conditioning, A Bibliography with Abstracts (NTIS/PS-75/345/CZ). National Technical Information Service. Jan. 1975. 71 abstracts. Both paper copy and microfiche are $25 ($35 foreign).

Solar Electric Power Generation, A Bibliography with Abstracts (NTIS/PS-75/346/CZ). National Technical Information Service. Jan. 1975. 94 abstracts. Both paper copy and microfiche are $25 ($35 foreign).

Solar Collectors and Concentrators, A Bibliography with Abstracts (NTIS/PS-75/347/CZ). National Technical Information Service. Jan. 1975. 57 abstracts (Excludes spacecraft applications). Both paper copy and microfiche are $25 ($35 foreign).

All titles are available from the National Technical Information Service, U.S. Department of Commerce, Springfield, Va. 22161. Please order by number. Buyers outside U.S. must add $2.50 for paper copy and $1.50 for microfiche, unless a specific foreign price is cited.

New Leading Indicator Index Seeks Timelier Warnings

The Composite Index of Leading Indicators has been revised by Commerce's Bureau of Economic Analysis in an effort to make it more accurate as a tool for forecasting major changes in the economy.

One major result of the revision is to make the index of 12 indicators less susceptible to distortions caused by high rates of inflation. Four series are retained from the old index (see table), five are substitutes for related series in the old index, and three are essentially new series representing activities not covered in the old index.

More available

Another advantage of the new list of leading indicators is that data for 11 of the 12 indicators will be available at the time of publication each month, compared with only 8 of 12 of the old list. This should reduce substantially the need for subsequent revisions.

The comprehensive review, which began in September 1972, also includes the coincident and lagging indicators, and changes in these series will be announced later.

This is the first review by BEA. Earlier reviews were conducted by the National Bureau of Economic Research (NBER) in 1966, 1960 and 1950. NBER first selected the indicators in 1937, and changing economic conditions have necessitated the periodic reviews.

The current assessment was directed by Professor Victor Zarnowitz of the Graduate School of Business at the University of Chicago, under contract to BEA and in collaboration with the NBER.

Prof. Zarnowitz and Dr. Charlotte Boschan of the NBER co-authored an article detailing the reasons for the changes in the May issue of *Business Conditions Digest*, a monthly BEA publication of economic measurements.

Both the new and the old series increased 4.2 percent in April, the biggest single-month gain in the history of the composite index. The old index will continue to be published in *Business Conditions Report* through December.

Michigan Productivity Plan Receives $150,000 Boost

Approval of a $149,993 grant from Commerce's Economic Development Administration will help continue a Michigan program to increase productivity and create new jobs.

The funds will be used to help pay the costs of a productivity enhancement program conducted by the University of Michigan's Institute of Social Research and its affiliate, the National Quality of Work Center.

Center officials said the program involves quality of work studies conducted in cooperation with labor and management. Unions and employers are participating in the cost of the studies.

What Was Changed . . . And Why

Series in old index	*Series in new index*	*Reason for change*
Average workweek of production workers, manufacturing	Same	
Index of net business formation	Same	
Index of stock prices, 500 common stocks	Same	
Index of new building permits, private housing units	Same	
Layoff rate, manufacturing (inverted)	Average weekly initial claims for unemployment insurance (inverted)	Layoff rate leads more consistently at troughs.
New orders, consumer goods and materials, 1967 dollars	New orders, durable goods	New series avoids duplication with orders for equipment. Deflation needed for better cyclical performance since the late 1960's.
Contracts and orders for plant and equipment, 1967 dollars	Same, current dollars	Deflation needed for better cyclical performance since the late 1960's.
Net change in inventories on hand and on order, 1967 dollars (smoothed)	Change in book value, manufacturing and trade inventories	Concept of including stocks on order is better. Deflation is needed for better cyclical performance since the late 1960's.
Percent change in sensitive prices, WPI of crude materials excluding foods and feeds (smoothed)	Index of industrial materials prices	Percent change is better than level. Leads are more consistent, especially since the late 1960's.
Vendor performance, percent of companies reporting slower deliveries		Best available indicator of changes in delivery lags. Good record of timing and conformity.
Money balance, 1967 dollars		Important measure of the quantity of money in real terms. Good scores for indicator performance.
Percent change in total liquid assets (smoothed)		Comprehensive measure of changes in wealth held in liquid form by private nonfinancial investors.
	Corporate profits after taxes	Quarterly and tardy (low score for currency).
	Change in consumer installment debt	Lacks timeliness. In recent period, very erratic and more nearly coincident than leading at troughs.
	Ratio, price to unit labor cost, manufacturing	Failed to lead at the last three business cycle troughs (1958-70). Work continuing on developing a satisfactory substitute.

Shale Oil Powers Great Lakes Ore Ship In Demonstration Run

The first successful demonstration in the United States of the commercial use of heavy fuel derived from shale oil took place recently aboard an ore vessel operating on the Great Lakes.

The joint Federal Government/industry fuel-testing project was coordinated by the U.S. Navy's Energy and Natural Resources Research and Development Office, the Coast Guard's Office of Research and Development, the Cleveland-Cliffs Iron Company and the Maritime Administration's Division of Great Lakes Shipping.

Rogers C. B. Morton, Secretary of Commerce and Chairman of the President's Energy Resources Council, welcomed the test as another step in developing alternative fuel sources to make the nation more energy independent.

"There are 80 billion barrels of recoverable oil contained in oil shale," Secretary Morton pointed out. "A great advantage of synthetic fuels such as oil shale is their adaptability to our existing energy system with few if any modifications. This demonstration is another indication that technology is being rapidly advanced to bring these fuels into prompt and economic commercial use."

The test program utilized the heavy oil fraction of 10,000 barrels of shale oil crude recently mined and processed by the Paraho Oil Shale Demonstration Project at Anvil Points, Colo., on the Navy Oil Shale Reserves. This crude was refined by the Gary Operations Company of Colorado. Prime contractor for the development of the fuel was Applied Systems Corporation of Vienna, Va.

The decision to include industry participation in this test was prompted by economic considerations and the expanding interest in oil shale. Industry supplied the test vessel and developed an analytical report of the fuel's performance in a commercial shipping operation. The fuel was burned in the two boilers of the Great Lakes ore carrier *Edward B. Greene,* owned by Cleveland-Cliffs, during a round-trip between Cleveland and Marquette, Mich. Results are being analyzed by Babcock and Wilcox, manufacturer of the boilers.

The successful completion of this test is a significant step in developing new domestic energy resources. Future plans by the agencies involved in this project include the testing of fuels derived from coal and tar sands, and a continuing test effort utilizing shale oil.

Final analysis of the boilers was due for completion by mid-June.

Industry's Role To Be Aired At Noise Conference, Seminar

Industry and government officials concerned with noise control will be able to make themselves heard at NOISE-CON 75, the 1975 National Conference on Noise Engineering, to be held September 15-17 at the National Bureau of Standards (NBSA) laboratories in Gtiehersburg, Md.

Co-sponsors of the meeting are the Institute of Noise Control Engineering (INCE) and NBS.

The three-day meeting will highlight standards activities and government programs in the field of noise control, featuring lectures on measurement technology, the psychological and physiological effects of noise, noise generation and suppression, and industrial noise control. In addition, several leading technical societies will present papers on recent developments in noise control within their own technical disciplines.

Presentations on government programs both regulatory and research—will be presented by the Environmental Protection Agency, the National Bureau of Standards, the Occupational Safety and Health Administration (OSHA), the U.S. Department of Transportation and other organizations. In the noise standards area, detailed reviews will be presented of international standardization in noise control, activities within the national voluntary standards system, and other professional standards activities.

U.S. industries have become increasingly concerned with noise control since the establishment of OSHA in 1970 and the passage of the Noise Control Act of 1972. NOISE-CON 75 will review progress in this field as well as plans for future regulations and standards by the government and through the American voluntary standards system.

Prior to NOISE-CON 75, a seminar on industrial noise control—an intensive short course—will be hled Sept. 11-14 at the Shoreham-Americana Hotel in Washington. It is expected to attract many newcomers to the field.

Further information concerning NOISE-CON 75, the NOISE-CON Seminar, or the proceedings of the conference may be obtained from the Institute of Noise Control Engineering, P.O. Box 3206, Arlington Branch, Poughkeepsie, N.Y. 12603 (914-462-6719).

Firms Told How To Team Up For Energy R & D

Cooperative research and development work—between individual companies and between industry and government—could provide an effective vehicle to help the U.S. fulfill its long-term energy requirements.

However, a Commerce Department advisory group which studied the problem indicates that these cooperative efforts must be planned and conducted with care to avoid possible institutional and legal problems.

Some guidelines for companies which want to achieve the benefits and avoid the pitfalls inherent in a cooperative approach to energy research and development are contained in a report resulting from a Commerce Technical Advisory Board (CTAB) study.

Dr. Betsy Ancker-Johnson, Assistant Secretary of Commerce for Science and Technology and chairman of the CTAB panel, said that "The Board members feel that some of our new energy technologies will not be developed rapidly unless joint ventures are created to share the high risk and large capital investment involved.

"This report explores how to avoid potential barriers as perceived by industry to joint ventures in energy R&D."

Both independent and cooperative research and development must be involved in the massive, long-term effort to improve and diversify the nation's energy resources, the panel noted. But for substantial projects requiring long lead times and significant risk and uncertainly, the advantages of concerted effort will be considerable, and probably essential.

R&D consortiums must be carefully designed and operated, however, to minimize possible legal and institutional problems, the report indicates.

The report contains:

A CTAB study which provides guidelines for joint research and development ventures with a minimum risk of antitrust challenge;

Proceedings of a December 16, 1974, symposium on the need for and barriers to cooperative R & D efforts in the energy field.

Results of a survey of Industrial Research Institute member firms which outlines industry's views of the obstacles to joint R & D efforts and offers eight illustrative case studies.

Order *Institutional and Legal Constraints to Cooperative Energy R&D,* (PB240929/AS), from NTIS, Springfield, Virginia 22161. The price is $6.25 for paperback and $2.25 for microfiche.

Industry's 1974 Pollution Control Outlays Fell Below Expectations

Nonfarm businesses in this country spent $5.2 billion for new plant and equipment to abate air and water pollution in 1974, compared with $4.9 billion in 1973, according to a survey by Commerce's Bureau of Economic Analysis.

The 5½ percent increase in antipollution spending compares with an increase of about 12 percent in total business expenditures on new plant and equipment in 1974. Expectations had been for a 32½ percent increase in antipollution spending in 1974, according to the 1973 survey.

These figures are not adjusted for price change. The prices of capital goods, as measured by the implicit price deflator for fixed non residential investment, rose 9½ percent in 1974. If prices of pollution abatement goods rose similarly, then real business capital spending for pollution abatement actually decreased in 1974. While BEA conducted its first survey of capital pollution abatement expenditures in 1973, data from other sources indicate that such spending has increased significantly in real terms each year since 1968.

Some of the difference between planned spending for 1974 and the actual outlays may have been due to shortages or delays. However, a significant portion was due to actual reductions in planned installation of antipollution devices.

Some of the cutbacks were made in anticipation of legal requirements and in advance of deadlines for compliance. A part of such spending is therefore deferable. Plans for pollution abatement projects may have been canceled or delayed in the second half of 1974 when capital goods prices rose dramatically and additional cash was needed to finance regular capital projects. Calls for relaxation of pollution abatement rules as a result of the energy crisis may also have played a part.

The slowdown is further reflected in reported plans for 1975. Business expects to spend $5.9 billion in 1975 for pollution abatement capital goods, a 13 percent increase from 1974. However, that compares with $6.5 billion business had reported in the 1973 survey as expected expenditure in 1974.

Industry detail

Five industries accounted for $3.6 billion, or 69 percent, of all antipollution spending in 1974: electric utilities ($1.5 billion), petroleum ($700 million), nonferrous metals ($500 million), paper ($500 million), and chemicals ($400 million). The same industries expect to spend $4 billion this year, or 68 percent of the total planned spending for air and water pollution abatement.

Four industries spent more than 10 percent of their total capital expenditures for pollution abatement purposes: nonferrous metals(21 percent), paper (18 percent), stone, clay and glass (13 percent) and blast furnaces and steel works (11 percent). For 1975, the same industries again plan spending in excess of 10 percent of their total capital spending on pollution abatement.

Increases in 1975 are planned by petroleum—36 percent, machinery except electrical—33 percent, and blast furnaces, steel works—26 percent. About two-thirds of business antipollution spending goes for abating air pollution.

Business also reported spending $400 million on new plant and equipment for handling solid waste in 1974 and plans to spend about the same in 1975. Solid waste spending was not covered in the 1973 survey.

U.S. Could Remain Net Importer Of Fertilizers

The United States was a net importer of nitrogenous fertilizers in 1974, although exports topped imports by nearly 4 percent during the second half of the year.

U.S. imports of nitrogenous fertilizers totaled 1,127,243 content tons in 1974, while exports were 1,033,818 tons.

Export contracts reported for the first half of 1975 indicate a continuing, and very sharp, decline in exports of both nitrogenous and phosphatic fertilizers.

Contracts reported to Commerce's Office of Export Administration listed a total of 279,701 content tons of nitrogen under contract for delivery in Jan.-June 1975 compared to 524,098 content tons in Jan.-June 1974. Contracts for phosphatic fertilizers were reported at 583,202 tons (P_2O_5 content) in the 1975 period compared to actual exports of 649,802 tons (P_2O_5 content) in 1974.

Production of ammonia, chief source of nitrogenous fertilizer, declined 0.7 percent in June-Nov. to 6,543,000 short tons from 6,500,000 short tons in the same period of the previous crop year.

According to figures compiled by the Bureau of the Census, inventories of fertilizer materials generally were higher in November than the year before, except for ammonium nitrate, which fell more than 35 percent in the year ending in November 1974, to a toal of 230,058 short tons.

Consumer 'Sounding Boards' Aid Standards Development Drive

Consumer input for voluntary standards development was heard at a May 8 meeting at Commerce's National Bureau of Standards on developing energy guide labels for home laundry equipment. This was the first Washington, D.C., area consumer "sounding board," sponsored by NBS and the Montgomery County Cooperative Extension Service.

As part of its energy conservation program, NBS has suggested that all home appliances be sold with an energy guide label that allows consumers to compare the energy use of similar appliances. Energy guide labels have already been placed on most room air conditioners. Other appliances to be labeled include refrigerators and freezers.

Consumer sounding boards, which originated three years ago, consist of about 20 people each, chosen to obtain a representative sample of the population with respect to age, sex, race and income. These volunteer participants learn about the standards development process and offer their opinions on the specific product being discussed.

Five national standards-making organizations are cooperating to promote the concept. Other sounding boards will be established throughout the country, sponsored by NBS, the American National Standards Institute, the National Fire Protection Association, Underwriters Laboratories, and the American Society for Testing Materials (ASTM) in conjunction with interested local groups. These five organizations are responsible for developing voluntary standards for a wide variety of products. Voluntary standards, while not legally enforceable, are accepted and followed by the vast majority of producers and distributors.

Into second year

The Delaware Valley sounding board, sponsored by ASTM, has been meeting monthly for over a year, and has offered opinions on standards for footwear, vacuum cleaners, and rubber products.

Consumers are already represented on many technical committees responsible for developing particular standards. However, consumer sounding boards can serve to increase the amount of consumer involvement and influence in development of these and other standards.

At NBS, the consumer sounding boards will contribute their ideas and opinions where needed. The sounding boards will be coordinated by the NBS Center for Consumer Product Technology which helps develop voluntary product standards as part of its work.

Ionosphere-Altering Technique Seen Holding Communication Promise

When scientists at Commerce's Institute for Telecommunication Sciences first demonstrated several years ago that they could modify the ionosphere through ground-based radio transmissions, the technique was billed as having exciting applications for long-distance communications (*Commerce Today,* October 18, 1971.)

Now the process has been tested successfully, and may provide the developing nations of the world with a less expensive alternative to satellite communications, among its many possible uses.

The ionosphere is that region of the earth's upper atmosphere where gases are ionized—incoming solar radiation causes electrons to be separated from some atoms, leaving positive ions and free electrons. It is an electrically neutral region, with equal numbers of positive and negative particles. Negatively charged electrons, being less massive than the positively charged ions, interact most strongly with radio waves.

Ionization in amounts large enough to have significant effects on radio waves begins in the D region at an altitude of about 60 kilometers, and continues through the E region (90-120 kms.) and the F region (150-400 kms.).

In electromagnetic signals propagating through the ionosphere, lower frequencies tend to be reflected back toward the earth, while higher frequencies penetrate the ionized layers and continue into outer space. The greater the density of the negatively charged electrons, the higher the frequencies which will be reflected.

ITS scientists designed and constructed a transmitter for ionospheric modification near Platteville, Colorado, through which they can create changes in the structure of the ionized layers on demand. Using a two million watt transmitter and its array of ring antennas, it can produce an effective radiated power of about 100 million watts in the ionosphere.

100-mile diameter

At F-region heights, the power density attained was about 50-millionths of a watt per square meter over an area in the sky with a horizontal diameter in excess of 100 kms. This power level is sufficient to produce and maintain ionospheric irregularities capable of supporting long-distance telecommunications by reflection.

The Advanced Research Projects Agency of the Department of Defense and groups from industry and universities cooperated in the ionospheric modification experiments, which achieved successful modification in all three regions of the ionosphere. They produced a large-scale, field-aligned, irregular structure in the ionopshere on demand, both day and night. This modified region acts as a large reflector in the sky for radio waves at frequencies ranging from HF through UHF, suggesting a potential usefulness for telecommunication purposes. More complete details are provided in the November 1974 issue of *Radio Science.*

Transmitter sites were established in Texas and receiving sites in California to test over-the-horizon communication at VHF frequencies. Voice, data, and facsimile transmissions were sent and received via scattering from the modified ionosphere above Platteville. The experiment demonstrated that field-aligned scatter from man-made ionospheric disturbances can indeed support communication circuits at frequencies normally used only for line-of-sight transmissions.

By demonstrating the practicality of using VHF transmissions for over-the-horizon communications via the modified ionosphere, these experiments have effectively extended the spectrum of usable frequencies. Because the scattering irregularities are field-aligned, there are basic geometric limitations on communication paths, depending on the location of transmitters and receivers in relation to the modified region.

The design problem is so complex that it is best approached with the aid of a computerized model. Such models have been developed to calculate the performance of transmitter/receiver locations anywhere on the earth. While there are distinct limitations, they do provide a practical alternative for some types of communications.

One possible application of the technique might be to locate a facility in Canada to create an ionospheric reflector providing electromagnetic communication between major cties in the United States at frequencies which are normally not capable of ionospheric propagation. Communication at frequencies which are normally line-of-sight, such as facsimile, teletype, or voice signals, would be possible from distant transmitters.

These ground-based ionospheric modifiers could also be used by developing nations to create reflectors for internal communications where rugged terrain or large distances would otherwise require costly installation of conventional equipment. The cost savings could encourage these nations to inaugurate communications that they now feel are too expensive.

Mobile Data Terminal Helps Police 'Let Their Fingers Do The Talking'

In more and more U.S. cities, officers in police prowl cars are letting their fingers do the talking.

In the front passenger seat is a little box with a keyboard and an upright screen or a printout device—a mobile digital communications terminal—that enables officers to send or receive messages in seconds rather than minutes.

Performance tests and experiments with the digital terminals are being conducted by Commerce's National Bureau of Standards. The test series, using equipment supplied by leading manufacturers, is under way at NBS's Electromagnetics Division in Boulder, Colorado.

The work is part of a Justice Department program for which the NBS Law Enforcement Standards Laboratory (LESL) provides technical assistance.

A principal concern of the LESL specialists is the compatibility of this digital equipment with current operating police radio systems. Technical considerations of major interest include signal transmission time, supply voltage level, error rate and display readability. Keyboard preference tests to determine the most favorable arrangement of keys for most users are also in progress.

Any sharp reduction in time on the air required for responding to calls and obtaining information significantly increases police effectiveness. For example, police in West Palm Beach County, Fla., reported enhanced capacity to handle a large number of calls—the tally rising from 500 to 70,000 "data base inquiries" a month as a result of digital terminal communication.

The digital system also contributes to greater safety for the patrol officer, since less cluttered communication lines allow help to be summoned faster.

LESL's role is to provide law enforcement authorities with technical guidance for the evaluation and selection of technical equipment. Established by an interagency agreement between NBS and Justice's Law Enforcement Assistance Administration in 1971, LESL is supplying the law enforcement community with technical reports, state-of-the-art surveys, user guidelines and national voluntary standards for equipment.

Current LESL contributions encompass communications equipment, security systems, investigative aids, protective equipment, police vehicles, court systems and other aspects of law enforcement.

Industry Highlights

Confectionery Sales Set Record Despite Volume Drop

(Industry Highlights is prepared by the Office of Business Research and Analysis, Bureau of Domestic Commerce.)

Estimated sales by U.S. confectionery manufacturers rose 29 percent to a record high of $2,771 million in 1974 despite a decline in poundage shipments, according to Commerce's Office of Business Research and Analysis (OBRA).

Shipments fell 4 percent from 1973 to 3,651 million, resuming a decline that had run from 1969 to 1972, but was interrupted by a slight increase in 1973.

Per capita consumption of the industry's products, including domestic and imported confections, dropped to 17.8 pounds in 1974 from 18.6 pounds in 1973, paralleling the percentage decline in production.

The figures are contained in the 48th annual report on the industry, "Confectionery Manufacturers' Sales and Distribution, 1974," prepared by OBRA, which is a branch of Commerce's Bureau of Domestic Commerce. The annual survey was requested and financed by the National Confectioners Association, with the assistance of the National Candy Wholesalers Association.

According to Norris Lynch, director of the study, soaring ingredient costs were a major problem for confectionery manufacturers in 1974. He notes that ingredient purchases cost $1.4 billion in the year just ended, $600 million more than in 1973.

Package goods remained the leader in sales by product class. The greatest sales increases in both volume and dollar sales were in bar goods which are made to retail for ten or fifteen cents and up.

Manufacturers' shipments to wholesalers represented 44 percent of their business, and direct sales to retailers 48 percent. The balance was shipped to consumers via manufacturers' outlet stores, to the government and to export markets.

U.S. exports as well as imports advanced in 1974. Canada is the principal foreign market for U.S. confectionery products and the United Kingdom is the principal foreign supplier.

"Confectionery Manufacturers' Sales and Distribution, 1974" includes information on quantity and value of manufacturers' shipments; per capita consumption; ingredient use and cost; sales by product type, retail price, type of outlet, and by geographic area and population; foreign trade; as well as a discussion of significant industry developments and trends.

The report is available from OBRA's Consumer Goods and Services Division, Room 1104, U.S. Department of Commerce, Washington, D.C. 20230, and for study at Commerce's District Offices.

Nine Business Economists To Advise Secretary Morton

Secretary of Commerce Rogers C. B. Morton has named nine of the nation's leading business economists to the Economic Advisory Board of the Department of Commerce. The board meets about four times each year to advise the Secretary of Commerce on matters of economic policy.

The members are A. J. Ashe, Vice President, B.F. Goodrich Company, Akron, Ohio; Donald R. Burrus, Manager, Advanced Economic Planning, Texas Instruments, Dallas; Albert H. Cox, Jr., Executive Vice President and Chief Economist, Lionel D. Edie, Inc., New York City; John V. Deaver, Manager, Economics Dept., Ford Motor Co., Dearborn, Mich.; Stanley V. Malcuit, Chief Economist, Aluminum Company of America, Pittsburgh; Grant E. Medin, Senior Economist, Atlantic Richfield Co., Los Angeles; James L. Rich, Director of Consumer Research, U.S. Steel Corp., Pittsburgh; Michael Sumichrast, Staff Vice President and Chief Economist, National Association of Homebuilders, Washington, D.C.; and Norman Weintraub, Director of Research, International Brotherhood of Teamsters, Washington.

U.S. Fertility Level Hits Record Low, But Population Keeps Rising

Annual fertility in the United States reached its lowest level in history in 1974, according to a report issued by Commerce's Bureau of the Census.

There are three basic measures of fertility: crude birth rate, general fertility rate, and total fertility rate.

The *crude birth rate* is the number of births per 1,000 total population. In 1974 this rate was 14.9, the same as in 1973—a rate 18 percent lower than 1970 and 41 percent below that for 1957.

The *general fertility rate* is the number of births per 1,000 women between the ages of 15 and 44. For 1974, this rate continued to decline to 68.5. In 1970, it was 87.9, and in 1957, 122.7.

The *total fertility rate* is the number of births that 1,000 women would have in their lifetimes if, at each year of age, they experienced the birth rates occurring in a given calendar year. Thus, this measure deals with *implied* lifetime fertility. The total fertility rate was estimated at 1,862 in 1974, compared with the 1970 figure of 2,480, and 1957's record of 3,760.

To place the total fertility rate in perspective, a rate of 2,100 is needed for the population to replace itself if there were no immigration. The report notes that although the total fertility rate is now below that level, the population is still growing by more than one million per year. This is because of variations in the age structure of the population. A relatively large proportion of women are in their childbearing ages now, and as long as the number of births remains larger than the number of deaths, the population will continue to grow.

Prolonged fertility at replacement level (again in the absence of immigration) would eventually produce an annual number of births equal to the annual number of deaths. It would also eventually produce a stabilized age structure. These results would not occur until about the mid-21st century due to the present youthful imbalance of the population.

The number of births decreased to 3.2 million in 1974, while there were an estimated 1.9 million deaths. Net civilian immigration was estimated at 360,000. These factors combined to give the United States a 1974 growth rate of 7.5 persons per 1,000 population. Between 1946 and 1962, the growth rate ranged between 14.9 and 18.3. In recent years, the figures have been: 1970, 10.9; 1971, 9.7; 1972, 7.8, and 1973, 7.1.

In terms of numerical growth, the total population of the United States was estimated to be 212,796,000 on January 1, an increase of 1,591,000 during 1974. This numerical gain was slightly larger than that for 1973, but about half the record increase of 3,058,000 in 1956.

The report examines annual rates of net growth, births, deaths, and net immigration from 1930 to 1973, annual measures of fertility from 1940 to 1974, and components of change by types of population for calendar and fiscal years.

Estimates of the Population of the United States and Components of Change: 1974, Series P-25, No. 545, is available for 55 cents from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, or from Commerce District Offices.

FEA Study Concludes Establishment Of Coal Futures Market Is Feasible

A recent study done for the Federal Energy Administration (FEA) found that sufficient inducements may exist for the commodity exchanges to consider a coal futures market.

The 20-page study, done for FEA's Office of Coal by Marcom Inc., says that a coal futures market, if established, could reach a trading volume of $2 billion annually within two years, and $10 billion in ten years.

Coal is now sold at a price negotiated directly between buyer and seller. About 85 percent of coal sales are executed under long-term contracts ranging from one to thirty years. The balance takes place in the "spot" market for relatively short-term delivery.

Present market conditions have created wide monthly swings in the spot purchase of coal. In 1974, the spot price rose to more than four times the contract price. However, this year, market conditions have changed and indications are that spot prices are lower than some contract prices. According to the study, a coal futures market could serve as an "effective price stabilizer," and could provide substantial additional benefits.

The study says that the level of potential income to be derived from such a market "compares very favorably" with the return on other basic futures market commodities.

The study cited these benefits:

— For the producer, a coal futures market that can guarantee a profitable level of prices could spur production and avoid the problem of creating new storage facilities.

— For the buyer, such a market could enable buyers to cut storage requirements enough to realize a cash flow saving of $250-$300 million plus interest.

— For labor, the futures market could provide a mechanism to keep many smaller companies operating, since they would be able to hedge their future production.

Government and public interests would also be served by such a market, the study concludes. It says that prices, and therefore profits, would be pegged at a more realistic level, which in turn would help the industry reach the national goal and to attain a healthier economic condition.

President Ford has established a goal of doubling coal production to 1.2 billion tons annually by 1975.

If this production goal is met and if the price of coal ranges from $12 to $24 per ton, the study says the trading volume for coal futures could grow to $10 billion by 1985. The commission cost, it adds, would range from $5 million to $25 million.

Copies of the study are available from the FEA Press Room, Old Post Office Building, Room 220, 12th and Pennsylvania Avenue, N.W., Washington, D.C. 20461.

New Census Report Has Boundary Changes

Data on annexations or detachments of territory by all incorporated places of 2,500 or more inhabitants in the United States over a four-year period ending January 1, 1974, are given in a new report by Commerce's Census Bureau.

Entitled "Boundary and Annexation Survey 1970-1973," the report notes the names of the places, state-by-state, which underwent changes in their boundaries during the period, the area of territory included in the changes, and the number of people affected, in each of the four years. It presents also information on new incorporations, discorporations, consolidations, mergers and similar actions in subdivisions of states.

The report is the first in what has been designated the G-30 series. A report issued in early 1973 presented similar data covering only 1970 and 1971.

The report notes that over the four-year period there were 23,698 annexations, 329 detachments and 61 other types of boundary change actions reported by the 5,300 incorporated places with 2,500 or more inhabitants in the United States. Also that three states—Illinois, California and Texas—accounted for 28 percent of the places that underwent change and 37 percent of all the annexations. The five next most active states in this respect—Ohio, Florida, Indiana, Wisconsin and Georgia—had 21 percent of the places that underwent changes and 14 percent of all annexations.

No boundary changes were reported in Maine, New Hampshire, Connecticut, Rhode Island, or the District of Columbia.

The report, GE-1, is for sale by the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402. Include the price of $2 per copy.

Calendar For Businessmen

June 15-17—Washington—National Coal Assn. convention, Statler Hilton Hotel. For information, NCA, 1130 17th St. NW., Washington, D.C. 20036. (212-628-4322).

June 18—Gaithersburg, Md.—Computer Networks: Trends and Applications 1975 symposium, National Bureau of Standards. Sponsors: NBS, IEEE Computer Society, Washington Chapter. For information, Computer Networks, P.O. Box 639, Silver Spring, Md. 20901 (301-439-7007).

June 19—Gaithersburg, Md.—Computing in the Mid-70s: an Assessment Symposium, National Bureau of Standards. For information, Bolt Beranek and Newman, Inc., 1701 North Fort Myer Drive, Arlington, Va. 22209 (703-524-4870).

June 23-27—Chicago—Clean Fuels From Coal Symposium II, Palmer House. For information, Institute of Gas Technology, 3424 South State St., Chicago, Ill. 60616 (312-225-9600).

June 24-26—Cleveland—Fundamentals of Metals Technology seminar, Sheraton Inn. For information, New York University School of Continuing Education, New York Management Center, 360 Lexington Ave., New York 10017 (212-953-7266).

June 24-26—New York—Casting seminar, Roosevelt Hotel. For information, New York University School of Continuing Education, New York Management Center, 360 Lexington Ave., New York 10017 (212-953-7266).

June 25-27—Washington—Federal Government Data Systems, 1975-85 Conference, Shoreham Americana Hotel, Sponsors: American Institute of Industrial Engineers, federal depts. and agencies. For information, AIIE, P.O. Box 25116, Los Angeles, Calif. 90025. (213-826-7572).

June 29-July 1—Carmel, Calif. — The Future For Printing Technology, Highlands Inn. For information, Institute for Graphic Communication, 375 Commonwealth Ave., Boston, Mass. 02115 (617-267-9425).

June 30-July 2—Washington—Management by Objectives in the Private Sector seminar, Georgetown Univ. For information, Ms. Betsy Girton, SSCE-Continuing Management Education, Georgetown University, Washington, D.C. 20057. (202-625-3001).

July 8-10—Washington—Executive Secretary/Administrative Assistant management seminar and Program Budgeting management seminar (separate events), Georgetown Univ. For information, Ms. Betsy Girton, Continuing Management Education—SSCE, Georgetown University, Washington, D.C. 20057 (202-625-4353).

INTERNATIONAL COMMERCE REPORT

U.S. Boosts Share Of World Market For Manufactures For Second Consecutive Year

The U.S. share of world exports of manufactures, excluding shipments to this country, posted a sizable gain in 1974 to reach 22.3 percent. This was the second consecutive annual improvement in the nation's relative position in the market for these products. The share increase, however, was smaller than in 1973 and was limited to the final three months of the year. These conclusions are based on trade data expressed in U.S. dollars valued at constant (first quarter 1971) exchange rates.

The value of U.S. shipments of manufactured goods climbed by nearly 42 percent in 1974, moderately faster than in the previous year, to a total of $64.6 billion. Exports by the other 14 leading suppliers also accelerated, posting a gain of about 37 percent. These trends resulted in an increment in the U.S. share of a little more than half a percentage point. For both the United States and the other suppliers, the large increases in export values were mainly attributable to the steep price rises which took place during the year.

When trade is expressed in U.S. dollars reflecting exchange rates prevailing during each period, the value of world exports of manufactures is higher, and the U.S. share therefore lower, than when constant exchange rates are used, as most major currencies have generally appreciated against the dollar since the first quarter of 1971. In 1974, however, the other 14 countries' currencies, on the

U.S. Share Of World Exports Of Manufactures

Adjusted for seansonal variation

Commodity	U.S. exports (million dollars)	U.S. share of world exports to foreign markets[1] (% based on current rates of exchange[2])	U.S. share of world exports to foreign markets[1] (% based on constant rates of exchange[2])
Manufactures, total			
1973	45,574	18.2	21.7
1974	64,561	19.0	22.3
1973 1st quarter	10,010	18.6	21.0
2nd	10,898	18.2	21.6
3rd	11,732	17.5	21.9
4th	13,035	18.7	22.5
1974 1st	14,273	19.3	22.1
2nd	15,825	18.6	22.1
3rd	16,862	18.8	22.0
4th[3]	17,740	19.6	23.0
Chemicals			
1973	5,781	18.0	21.7
1974	8,893	17.5	20.8
1973 1st quarter	1,230	18.0	20.4
2nd	1,343	17.8	21.3
3rd	1,501	17.1	21.7
4th	1,717	19.3	23.3
1974 1st	2,027	18.6	21.5
2nd	2,183	16.9	20.4
3rd	2,356	16.8	20.0
4th[3]	2,334	17.9	21.4
Nonelectric machinery			
1973	12,212	24.0	28.3
1974	16,810	25.4	29.3
1973 1st quarter	2,718	24.7	27.5
2nd	2,916	24.0	28.0
3rd	3,221	23.7	29.1
4th	3,412	24.2	28.7
1974 1st	3,639	24.9	28.2
2nd	3,987	25.5	29.9
3rd	4,434	25.3	29.1
4th[3]	4,802	26.0	30.2

Commodity	U.S. exports (million dollars)	U.S. share of world exports to foreign markets[1] (% based on current rates of exchange[2])	U.S. share of world exports to foreign markets[1] (% based on constant rates of exchange[2])
Electric machinery			
1973	5,094	20.5	24.5
1974	7,156	21.9	25.5
1973 1st quarter	1,139	21.4	24.1
2nd	1,220	20.7	24.5
3rd	1,324	19.8	24.7
4th	1,413	20.4	24.6
1974 1st	1,606	21.9	25.2
2nd	1,743	21.4	25.5
3rd	1,925	22.6	26.2
4th[3]	1,890	21.6	25.3
Transport equipment			
1973	10,813	25.2	29.6
1974	14,583	27.6	31.6
1973 1st quarter	2,472	26.5	29.6
2nd	2,614	25.0	29.4
3rd	2,640	23.2	28.6
4th	3,084	25.9	30.6
1974 1st	3,153	28.7	32.4
2nd	3,522	26.3	30.4
3rd	3,697	27.0	30.9
4th[3]	4,268	28.8	32.8
Other manufactures			
1973	11,674	11.7	14.1
1974	17,119	12.5	14.8
1973 1st quarter	2,451	11.5	13.1
2nd	2,805	11.7	14.0
3rd	3,046	11.4	14.5
4th	3,409	12.3	14.9
1974 1st	3,848	12.7	14.7
2nd	4,390	12.6	15.1
3rd	4,450	12.4	14.6
4th[3]	4,446	12.5	14.9

Note: The term "manufactures" refers to chemicals, machinery, transport equipment, and other manufactures except mineral fuel products, processed food, fats, oils, firearms of war, and ammunition. U.S. data have been revised to reflect the new seasonal adjustment factors released at the end of February.

[1] World exports are defined as exports from the 15 major industrial countries. Percentage shares are based on values excluding shipments to the United States. These nations, which account for 80 percent of world exports of manufactures to foreign markets, are: United States, Austria, Belgium-Luxembourg, Canada, Denmark, France, Federal Republic of Germany, Italy, Netherlands, Norway, Sweden, Switzerland, United Kingdom, and Japan.

[2] In the two series of U.S. percentage shares presented, the first column shows shares based on the official rates of exchange for merchandise shipped during each period, and the second column shows shares based on data measured at rates of the first quarter 1971, prior to widespread currency changes.

[3] Preliminary.

average, depreciated slightly against the dollar. When their exports are measured at current exchange rates, the value climbed by 34 percent, somewhat slower than in 1973 and the U.S. share showed a fractionally larger gain to 19 percent.

As mentioned in previous reports in this series, neither method of measurement provides an entirely satisfactory view of the U.S. exports performance relative to that of other countries. To provide continuity with preceding articles, the analysis that follows is based on U.S. dollar values reflecting constant rates of exchange. A more accurate method of measurement is being developed for use in this series.

Share gains in most groups

The overall improvement in the U.S. position resulted principally from strong gains in transport equipment and both machinery groups, which more than offset the sizable loss in chemicals.

Although U.S. transport equipment had the smallest export growth rate among the five commodity groups, it recorded the largest share increase. Shipments climbed by 35 percent, raising the nation's standing by two points to 31.6 percent, the highest level since 1969. Deliveries of civilian aircraft were buoyant, especially to Japan, Sweden, and Brazil. At the same time, shipments of cars, trucks, and related parts to Canada rose and sales of automotive products to other countries also climbed above the levels of the previous year.

The U.S. share advanced by a full point in both nonelectric and electric machinery. In the market for nonelectric machinery, the U.S. position rose to 29.3 percent, boosted by an export gain of nearly 38 percent. Contributing importantly to the improvement were higher deliveries of mining and well drilling machines, agricultural machinery, construction equipment, and heating and cooling equipment. Shipments of computers climbed more rapidly but their parts slowed considerably from the strong pace set the previous year.

U.S. exports of electric machinery advanced by about two-fifths, substantially faster than those of other suppliers. As a result, this country's standing improved to 25.5 percent. The steepest export gain occurred in household electrical equipment where this country's sales soared by 70 percent. At the same time, shipments of power machinery also rose sharply, as did those of semiconductors, particularly to Mexico, Korea, and Singapore.

In "other" manufactures, a diverse group encompassing mainly semifinished goods and consumer nondurables, the United States also posted a sizable enlargement in share to 14.8 percent. The biggest export advances were recorded in iron and steel, particularly tubes, pipes, and fittings, as well as plates and sheets. Greater shipments of rubber tubes and tires together with increases in kraft paper and board also contributed to the overall expansion of 47 percent.

Although the United States achieved its highest export growth rate in chemicals, the country's position, nevertheless, deteriorated to 20.9 percent as sales by other suppliers rose even more rapidly. This loss reversed the strong gain of the previous year. Because of higher prices, the value of manufactured fertilizer deliveries doubled. Shipments of organics to the Netherlands, Canada, Japan and Brazil were considerably higher than in 1973. Moreover, plastics and inorganics were also expansive.

Port Expansion In Iran, Pakistan A Forward Signal To U.S. Suppliers

Neighboring Iran and Pakistan, though almost in separate worlds as to current economic wealth, have parallel programs of port expansion, a visiting U.S. trade mission learned recently. These plans in both countries, each requiring substantial quantities of equipment and services, should be watchwords for U.S. suppliers to the marine industries.

The Shipbuilding, Port Construction and Maintenance trade mission, sponsored by the Commerce Department's Bureau of International Commerce, was greatly impressed by the opportunities discovered on its April visit. The 12 business executives—suppliers of paints, dredges, cranes, ships, engines, work boats, engineering and design services—found, however, that determined efforts are essential to overcome European competition and conclude specific sales in these markets.

Protocol with Iran

The framework for future business in Iran is in the protocol between Iran and the United States, signed March 4, calling for Iranian purchases of U.S. products and technology totaling $15 billion over the next five years. In addition, as a result of increased oil revenues, the government has expanded proposed investments under its fifth economic development plan (effective March 21, 1973) from $36 billion to about $69 billion.

The rapid pace of Iranian economic expansion has placed a heavy burden on existing port and shipping facilities. Now under consideration is a master plan for development of a number of commercial ports. Although the Iranians in some instances have engaged European consultants for these projects, the mission was assured that opportunities were still open for U.S. firms to participate in the actual construction and supply of equipment.

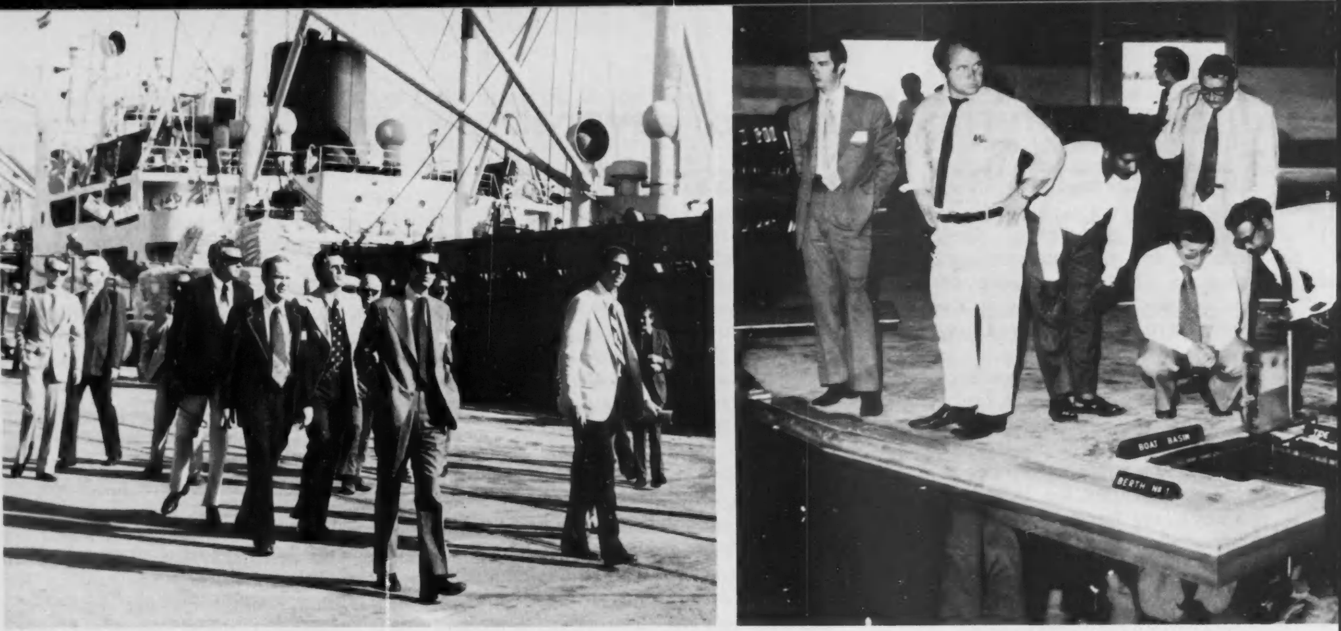
The prime point of contact for U.S. firms wishing to participate in these projects will be the Iranian Ports and Shipping Organization in Tehran. Dr. Khosrow Zarrabi, deputy director and port projects manager, expressed the hope that there would be greater U.S. response to future requests for tenders for his organization. To bid, interested companies should first assure that they are placed on the list of qualified suppliers maintained by the National Planning Organization. Zarrabi also stressed that conditional proposals are not welcome, but in assessing bids the PSO will weigh not only price but also the time within which the contractor can deliver.

Mission members tended to feel that some of the Iranian requirements would present obstacles to tendering by U.S. firms. While some contracts may be negotiated, the normal tender requires a guarantee bond which must be endorsed by the Iranian National Bank (Bank Markasi) and is extendable at the option of the client. The contractual language is Farsi, and disputes are subject to the jurisdiction of Iranian courts. To best meet these requirements some firms are considering working through an Iranian partner or agent. It was also the consensus that Iranian Government contracts, however valuable, could not be obtained without a long-range effort and consistent attention to bidding requirements and tender dates.

The mission's actual inspection of port installations on the Persian Gulf provided evidence of the expansion still required to satisfy the country's explosive economic growth. At the existing ports, ships commonly wait 30 to 60 days to obtain a berth for unloading, and facilities for lightering are also inadequate. To meet these problems, efforts are being concentrated at Bandar Shahpour, where four new berths are under construction and scheduled for completion by March 1976. Stages II and III of the plan call respectively for a further 10 and 14 berths (permitting ships of 40′ draft) within the next five years. Emphasis will be on bulk cargoes with corresponding shore facilities for grain, ore, and chemicals; but the port will also include container yards and loading facilities and a barge harbor. Dredging of the port channel, which extends about 40 miles to the open sea, will be a continuing requirement.

Mission members also learned of plans for another major harbor, to be developed at Bandar Abbas, but were unable to visit the actual site.

Contracts for the present phase of expansion have gone to European firms,



PORT TOURS IN EACH COUNTRY—*At Khorramshahr (Iran), members of shipbuilding and port equipment mission inspect cargo-handling operations. At right, in Karachi (Pakistan), U.S. group looks on as Port Trust technicians demonstrate hydraulic model of harbor.*

but it was emphasized that U.S. firms would be welcome to supply ancillary equipment or bid on future projects. In addition, even though major purchasing decisions are ordinarily made in Tehran, some mission members found private shippers on the Gulf interested in the possibility of acquiring American-made cranes, harbor vessels, and other equipment.

Expansion in Pakistan

Pakistan lacks the vast petroleum wealth with which Iran intends to finance its port expansion; still Pakistan foresees an orderly program of port development which may offer business opportunities for U.S. firms for years to come. In addition, Pakistan offers the advantages of well educated and experienced technicians and skilled labor, relatively low prices, and under-utilized capacity.

Expansion thus far is the function of the Karachi Port Trust, inherited from the British in 1947. With 26 berths rebuilt or constructed since Pakistani independence and four more being added, the KPT plans for a further 26 berths in phases starting two years hence if financing becomes available. The KPT also has adopted a program for improving its cargo handling facilities and widening and deepening the lower harbor.

The nationalized Karachi Shipyard and Engineering Works proved of special interest to mission members because of its diversified production capabilities. This organization was particularly interested in exploring the possibility of joint ventures with American firms.

Despite the improvements undertaken or foreseen at Karachi the Pakistani Government is concerned about growing congestion and the dangers of dependence on a single harbor for the nation, so that plans are being developed for an entirely new installation at Port Qasim, about 20 miles east of Karachi. About 20 miles from the open sea, Port Qasim would require extensive dredging during its proposed development. It would be specially designed to handle bulk cargoes and would offer a site for a future refinery and petrochemical complex.

The first wharf at Port Qasim is to be erected within the next 18 months through a turnkey project to be financed by the government. The first phase of dredging of about 1.5 million cubic yards, to permit vessels up to 10,000 tons, is also expected by 1976. If expansion proceeds, contingent on additional financing, the management of the Port Qasim Authority would welcome tenders from U.S. firms.

The fact that both the Iranian and Pakistani markets may require extensive time and effort to develop seems not to have discouraged most mission members. John W. Stribling of the Ellicott Machinery Corp., Baltimore, commented that finding a market for shipbuilding or port equipment is normally "a long-term proposition." Nevertheless, the participants anticipate sales for their companies during the next year of $10 million or more in each country. C. R. Morgan, Harnischfeger Corp., Milwaukee, found a limited market for large cranes but an excellent market for small and medium-sized cranes. Other mission members reported promising markets for harbor craft, diesel engines, and systems for bulk materials, handling and processing. On the other hand, Norman Duncan of the International Paint Co., New York, found no market for marine coatings in either Iran or Pakistan. Beyond the immediate scope of this mission it appeared that Iran might offer a market for house trailers or prefabricated housing, and in both Iran and Pakistan there seemed to be some interest in desalting installations. Both countries also contemplate the erection of steel plants tied to their new port installations.

Further information about business prospects in both Iran and Pakistan may be obtained through C. Melvin Sonne, Office of International Marketing, Room 5029, U.S. Department of Commerce, Washington, D.C. 20230; telephone 202-967-2521. Sonne headed the Iran-Pakistan trade mission. Other members, in addition to those already mentioned, were: Wilhelmus A. Bemelman, Jervis B. Webb Int'l., Detroit: Wagn Eskelund, Ralph M. Parsons, Pasadena, Calif.; Edward D. Fry, Aluma Ship/Steel Ship, Pine Bluff, Ark.; Jan Holterman, Caterpillar Tractor, Peoria, Ill.; W. T. Little, Lufkin Industries, Lufkin, Tex.; John B. Marler, Monark, Monticello, Ark; Diuguid B. Parrish, Hydranautics, Goleta, Calif.; Alfred Schmidt, Western Gear, Everett, Wash.; and James J. Viciana, Robins Engineers & Constructors, Totowa, N.J.

U.S.-Iran Group Meets

A 20-member steering committee of the U.S.-Iran Joint Business Council met May 16 in Washington with John O. Logan of Universal Oil Products Co. serving as chairman and James A. Linen of Time, Inc., as vice-chairman, and decided to proceed with prompt formation of a full council. After the meeting, at the U.S. Department of Commerce, the group met with the Shah of Iran at Blair House. For Council details write: John Brewer, Chamber of Commerce of the U.S., 1615 H St., NW., Washington, D.C. 20062.

Japanese Firms Respond Favorably To Franchising, U.S. Mission Finds

Businessmen in Tokyo, Osaka and Fukuoka, are you interested in offering customers Thrifty rent-a-car or rent-a-truck service? Fast printing by Kopy Kat? Leathercraft and tools by Tandy? Hotel service a la Sheraton?

Each of these U.S. franchisers asked such questions on a recent trade mission to Japan. The affirmative responses received by each led the mission to conclude that now is a particularly opportune time to offer franchises for U.S. products or services in the Japanese market.

Franchising is especially attractive today to the many aggressive, substantial Japanese companies looking for diversification opportunities, according to mission director William A. Walmsley of the Commerce Department's Bureau of International Commerce. Such firms see it as a means to counteract or offer an alternative to the dominant and pervasive Japanese trading companies. Also, franchising is appealing because it provides management know-how and reduces the need to recruit and develop large management staffs.

Comparing notes with a Commerce-organized franchise trade mission that went to Japan in 1969, the current group decided that the market is more open now than then, when changes in traditional business methods were beginning to emerge.

U.S. sales prospects for consumer goods are expected to improve during the year as the Japanese economy begins to settle down and personal consumption again advances. In addition, the current high Japanese inflation rate is making U.S. products more competitive. These are factors favorable to franchising, which is largely consumer oriented. On the negative side is the problem of space in Japan. Generally, a franchise arrangement would require a number of retail outlets conveniently located to serve the consumer; but in and around the cities, almost all available space seems to be occupied.

Now back in the United States, the mission members are pursuing negotiations with more than 60 prospective franchisees—of about 150 with whom they talked.

Almost every American-quality product or service can find a good market in Japan, says Walmsley: "As one travels through the cities, one realizes how greatly attuned the Japanese are to the Americen way of life. In what other countries can one buy American-style hot dogs at a professional league baseball game?"

One of the mission members feels that his company's move into Japan would be a first step in penetrating other Far Eastern areas. Three members returned to Tokyo at the end of the mission for further discussions. All found possibilities in Tokyo and Osaka, but they also found that Fukuoka, where there are virtually no foreign companies, offers a unique opportunity for U.S. firms. The Foreign Trade Association there, meeting with the mission members, urged that U.S. companies consider Kyushu Island in their plans.

Robert Walker, Sheraton Inns, Boston, observed in Fukuoka: "Although this section of the mission had the least in number of appointments it produced the most in positive leads. I think this is because in Osaka and Tokyo the hotels are large and necessarily they are controlled and operated by large companies. The towns on Kyushu Island are smaller and the hotels smaller and less sophisticated and the need for franchising is more evident."

In addition to Walker, mission members were Lloyd H. Redd, Tandy Leather Co., Fort Worth; Cecil R. Davis, Thrifty Rent-A-Car System, Inc., Tulsa; and Benjamin J. Dailey, Kopy Kat, Inc., Fort Washington, Pa.

INTERVIEW IN OSAKA—*Mission member Lloyd H. Redd (left) of Tandy Leather discusses business prospects with Mr. Sasagawa of the Hankyu Department Store.*

Official Trade Briefs

This article is another in a series of reports that describes actions affecting world trade, as compiled by the Legislative and Tariff Policy Division of the International Economic Policy and Research Staff's Office of International Trade Policy.

THE PRESIDENT

Oil Import Fee: The President announced on May 27 that, effective June 1, the supplemental fee on imported oil would be increased by $1 per barrel.

STATE DEPARTMENT

International Commodity Policy: The Secretary of State, speaking before the Ministerial Council of the Organization for Economic Cooperation and Development on May 28, called on industrialized and developing nations to cooperate in building a world economic system that would benefit all countries. The Secretary announced that the United States is prepared to discuss various proposals dealing with supplies and prices of raw materials. He stated that the United States proposes that the Multilateral Trade Negotiations under way in Geneva develop new rules and procedures on such questions as freer access to supplies and markets, promotion of mining and processing industries, and settlement of disputes; that new commodity arrangements in individual commodities be discussed on a case-by-case basis; that the World Bank explore new ways of financing raw material investment in producing countries; and that mechanisms for stabilization of commodity export earnings be reviewed in the context of the International Monetary Fund. The Secretary previously had stated, however, that the United States does not believe that tying commodity prices to a world index of inflation is the best solution to present commodity problems. Developing nations in particular have been interested in an international agreement on commodities, as many of them depend heavily on their earnings from raw materials. The Secretary also declared that the United States is prepared to participate in a comprehensive system of international grain reserves which would be held by individual countries.

On the same day, before the International Energy Agency, the Secretary declared that the United States is willing to discuss raw material problems and other international economic issues in the context of a reconvened preparatory energy conference in Paris. The Secretary said that separate commissions should be created to deal with issues such as energy, raw materials, and problems of the most seriously affected (least-developed) nations.

THE CONGRESS

Committee Hearings—Senate: The Subcommittee on Foreign Commerce and Tourism of the Committee on Commerce held hearings May 7 and 12 on S. 329, 995, and 1303, bills relating to foreign investment in the United States. While the bills differ somewhat on procedures and exact requirements, each requires foreign investors to report to the government acquisition of certain portfolio or direct holdings in U.S. companies. S. 995 and 1303 also require the reporting of certain real estate purchases. Also, S. 995 would prohibit any foreign investment in such sensitive areas as defense industries and public media in addition to requiring the reporting of other foreign investments. The Subcommittee concluded hearings April 29 on proposed reductions in the budget for export promotion programs of the Department of Commerce, as well as changes in fees for certain services provided by the Department.

The Committee on Government Operations held hearings April 30 and May 1 on S. 1439, which would delegate all authority to regulate exports of certain strategic and sensitive materials to the Commerce Department.

The Subcommittee on Foreign Agriculture and Forestry held a hearing on S. 1354 and 1788, which would permit foreign countries to hold in the United States reserve stocks of agricultural commodities which would not be subject to export controls.

The Subcommittee on Multinational Corporations of the Committee on Foreign Relations held a general hearing May 19 on the global role of multinational corporations.

Committee Hearings—House: The Subcommittee on Trade of the Committee on Ways and Means held hearings May 7 and 8 on House Concurrent Resolution 252, which would extend Most-Favored-Nation (nondiscriminatory) treatment to products of Romania. The Subcommittee held hearings May 13 and 19 on H.R. 5897, which would amend the Trade Act of 1974 to allow extension of the Generalized System of Preferences to OPEC countries which did not participate in the oil embargo.

The Subcommittee on Trade and Commerce and the Subcommittee on International Organizations of the Committee on International Relations held numerous hearings in May on H.R. 6382 and similar bills which would remove the primary embargo against Cuba as well as the prohibition of aid to nations that trade with Cuba or whose ships enter Cuban ports. The hearings were to resume early in June.

The Subcommittee on Fisheries and Wildlife Conservation and the Environment of the Committee on Merchant Marine and Fisheries held hearings May 13 and 14 on H.R. 80, H.J. Res. 32, and H.J. Res. 448. The first two bills are similar and would broaden the Pelly Amendment to the Fishermen's Protective Act of 1967 by authorizing the President to embargo importation of all products—not just fish—from those countries which conduct fishing operations in a manner or under circumstances which diminish the effectiveness of an international fishery conservation program. However, H.J. Res. 32 would authorize the President first to embargo imports of fish products and, if this move were ineffective, to embargo imports of all products from the country concerned. H.J. Res. 448 provides for an embargo on products produced or distributed by a foreign enterprise which engages in commercial whaling. In some cases, and especially in the case of state-trading countries, the bill's definition of a "foreign enterprise" might result in an embargo of all imports from the country in which the enterprise is based. Hearings on these bills will resume June 13.

The Subcommittee on Science, Research, and Technology of the Committee on Science and Technology held several hearings on H.R. 254 and related bills, which would declare a national policy of converting to the metric system in the United States. Hearings will continue this month.

The Subcommittee on Public Lands of the Committee on Interior and Insular Affairs held hearings May 13 and 15 on H.R. 5544, the Public Land Timber Conservation Act. Main provisions of the bill are to require that all timber harvested from lands owned by the United States and located west of the 100th meridian be processed in the United States, and that only certain products from the processing of timber harvested from such land may be exported from the United States.

The Subcommittee on International Resources, Food, and Energy of the Committee on International Relations held a general hearing May 1 on U.S. international energy policy.

New Legislation: Since the opening of the 94th Congress, 343 trade and related bills have been introduced. Proposed legislation not previously reported in this column includes: S. 1602, to prohibit shipment in interstate or foreign commerce of any **raw or finished fur or leather** if such fur or leather comes from animals trapped in any foreign country which has not banned the manufacture, sale, or use of leg-hold or steel-jaw traps; S. 1641, to amend the Agricultural Trade Development and Assistance Act of 1954 to provide the United States with the flexibility to carry out the national interest or humanitarian objectives of that Act; S. 1654, to amend the Agricultural Trade Development and Assistance Act of 1954; S. 1668, to amend the Agricultural Trade Development and Assistance Act of 1954 to broaden and emphasize the humanitarian purposes of such Act;

S. 1674, providing for participation by the U.S. Government in the International Cotton Advisory Committee, the International Lead and Zinc Study Group, the International Rubber Study Group, and the International Seed Testing Association, and authorizing appropriations therefor; S.J. Res. 81, to regulate commerce by prohibiting importation into the United States of any **fish or fish products** by any foreign enterprise which engages in commercial whaling activities; S. 1788, to facilitate the sale of U.S. agricultural commodities to be stored in the United States not subject to export control and restricted from resale into U.S. markets;

H.R. 6517, to amend the Tariff Schedules of the United States (TSUS) with respect to the rate of duty on **strip of iron or steel, in coils,** imported for use in the manufacture of cotton bale ties; H.R. 6546, to amend the Commodity Credit Corp. Charter Act, as amended, to provide the highest possible prices in foreign markets for American agricultural producers and to assure a reliable supply of raw foodstouffs to foreign purchasers; H. Res. 431, to provide for an investigation on the impact of imports on unemployment; H.R. 6615, to remove U.S. quotas on imports of **meat;** H.R. 6627, to amend the Agricultural Adjustment Act by establishing a variable import fee on **certain dairy products;** H.R. 6632, to provide increased congressional oversight of foreign military sales conducted under the Foreign Military Sales Act; H. Res. 436, to oppose the lifting of sanctions against Cuba and to request the advice and consent of the Senate prior to any proposed change in U.S. Cuban policy;

H.R. 6661, to prohibit actions by U.S. exporters which have the purpose or effect of supporting restrictive trade practices or boycotts imposed against countries friendly to the United States by other foreign countries; H.R. 6663, to authorize disposal of **asbestos chrysolite** from the national stockpile and the supplemental stockpile; H.R. 6685, to make changes in the treatment of foreign income, to promote development of an open, nondiscriminatory, and fair world economic system, to stimulate the economic growth of the United States; H.R. 6773, to amend the TSUS to provide for duty-free entry of certain **machines, molds and equipment,** if products of Canada, used in **molding and forming plastic materials;** H.J. Res. 444, to save the **great whales** from extinction by amending the Fishermen's Protective Act of 1967 to impose an embargo on the products of all foreign enterprises engaged in commercial whaling;

H.R. 6907, to direct the Secretary of Commerce to require reports from foreign investors in the United States and their agents; H.R. 6953, to provide for free entry of **certain scientific equipment** for the use of Oregon State University, Corvallis, Ore.; H.R. 6983, to suspend until July 1, 1976, the duty on **certain elbow prostheses** if imported for use, or for free distribution, by certain public or private nonprofit institutions; H.R. 7034, to prohibit importation of **fresh strawberries** into the United States during certain periods of the year; and H.R. 7246, to establish a ceiling on **certain fuel imports**, to provide for mandatory allocation of petroleum, and to equalize petroleum prices.

Also, S. 1543 is to enforce the Jones Act prohibition against the use of foreign vessels to transport freight between Alaska and the continental United States—not, as was reported in a previous column, to remove the prohibition.

INT'L TRADE COMMISSION

Relief from Imports: Following receipt of a petition filed by the Columbia Plywood Corp., a wholly owned subsidiary of the Columbia Corp., the International Trade Commission on May 12 instituted its first investigation under section 201 of the Trade Act of 1974, to determine whether **birch plywood doorskins**—plywood with a face ply of birch—are being imported into the United States in such increased quantities as to be a substantial cause of serious injury, or the threat thereof, to the domestic industry producing an article like or directly competitive with the imported article.

Dumping Case: The Commission announced that it will hold a public hearing in Washington July 22 to determine whether it should reopen and review its determination of Jan. 10, 1974, in investigations relating to **primary lead metal** from Australia and Canada.

TREASURY DEPARTMENT

Countervailing Duty Case: The Department announced initiation of a countervailing duty investigation on **hydrogenated castor oil and 12 hydroxystearic acid** from Brazil.

Dumping Cases: A tentative negative determination has been issued in the investigation of **vinyl clad fence fabric** from Canada.

The Department announced a Modification of Dumping Finding on **pig iron** from Canada. Pig iron is no longer being, nor is likely to be, sold at less than fair value by the Quebec Iron & Titanium Corp., Sorel, Quebec.

COMMERCE DEPARTMENT

Investigations—Firms: On the basis of petitions filed under provisions of the Trade Act of 1974, the Department has opened investigations on the effect of imports on behalf of: Algy Shoes, Inc., Everett, Mass. **(footwear for women)**, and Town and Country Shoes, Inc., St. Louis **(footwear for women).**

Adjustment Assistance—Firms: The Department certified Joseph Weiss & Sons, Inc., Brooklyn, **(manufactured granite)** eligible to apply for adjustment assistance under the new Trade Act.

LABOR DEPARTMENT

Adjustment Assistance—Workers: The Department certified approximately 300 workers of the Allen Quimby Veneer Co., Bingham, Maine **(birch plywood doorskins)** as eligible to apply for adjustment assistance under the Trade Act.

Investigations: On the basis of petitions filed under the Trade Act, the Department has opened the following new investigations on the effect of imports on behalf of workers and former workers of the following companies, all producers of **women's footwear:** Lisbon Shoes Inc., Lisbon, N.H.; Brown Shoe Co., Newport, Ark.; Algy Shoe Co., Everett, Mass.; Schwartz & Benjamin, Inc., Lynn, Mass.; Brown Shoe Co., Salem, Ill.; Florsheim Co., Palmyra, Mo.; Herbert Levine, Inc., New York City; Palizzio, Inc., Long Island City, N.Y.; and American Girl Fashions, Inc., Braintree, Mass.

Investigations were also instituted on behalf of workers and former workers of: FMC Corp., Parkersburg, W. Va. **(textile yarn, rayon staple and tow);** Essex Int'l. Milford, Utah **(copper precipitate and concentrate);** Inmount Corp., Winthrop, Maine **(coated and laminated fabrics);** Utica Cutlery Co., Utica and New York Mills, N.Y. **(stainless steel table flatware);** RCA Corp., Mountaintop, Pa. **(transistors and other semi-conductor devices);** Magnavox Co., Jefferson City and Greenville, Tenn. **(television receivers and radio-phonograph-tape deck combinations);** Vulcan Corp. Lawrence, Mass. **(plastic heels, polyvinyl chloride and urethane soles for women's footwear);**

TRW Inc., Philadelphia **(carbon composition resistors);** General Electric Co., Louisville **(harnesses for dishwashers and disposals);** Anaconda Co., Perth Amboy, N.J., **(copper shapes, wire bars & cathodes);** Manhattan Shirt Co., Ashburn, Ga. **(men's, women's and children's apparel);** General Electric Co., Decatur, Ill. and headquarters staff in Syracuse, N.Y. **(electronic equipment);** General Electric Co., Portsmouth, Va. **(television receivers);** Mavest, Inc., Timonium, Md. **(men's casual apparel);** and G. T. E. Sylvania, Batavia, N.Y. **(radios, yokes, flybacks & television receivers.)**

Commodities

The following report was compiled by the International Commodities Division, Office of Import Programs, Bureau of Resources and Trade Assistance.

Coffee: At an International Coffee Organization meeting in London April 14-25, producers and consumers discussed renegotiation of the International Coffee Agreement. Among the featured approaches to a new agreement were these, suggested by the U.S.: 1) country export shares fixed annually in two parts, 80 percent based on an agreed formula and 20 percent determined by the level of exportable stocks in producing countries verified on an agreed date in the preceding coffee year; 2) a target price range consistent with agreement objectives; 3) an internationally-controlled stock of 10 million bags to support the quota system in stabilizing prices and regulating supplies. Next negotiating meeting: by the International Coffee Council in London June 24-July 11.

Bananas: Exporting countries proposed a formal International Banana Agreement at a session of the FAO Intergovernmental Group on Bananas at Abidjan, Ivory Coast, April 21-May 3. Importing countries, while not accepting, agreed on establishment of a working party to discuss feasibility of an agreement. The U.S. and ten other nations are in the working party. The 28 nations that met at Abidjan covered 95 percent of world banana exports, 80 percent of imports.

Rubber: The International Rubber Study Groups (IRSG), formed in 1944 and now consisting of 31 producing or consuming nations, held an executive committee meeting in London April 21-22. A scheme by three major natural rubber producing nations — Malaysia, Indonesia and Thailand—for price stabilization based on a buffer stock for natural rubber was expected to be discussed, but this matter was delayed pending consideration of details by the sponsors. Discussion is expected at an October IRSG assembly in Djakarta, Indonesia.

Tin: The fifth International Tin Agreement, due to go into effect in 1976 when the current agreement expires, is being discussed by 30 countries at Geneva through June 20. Although the United Nations sponsors the tin conferences, the International Tin Council (ITC) is a separate producer-consumer agreement with its own organization. The U.S. is the only major consuming country that is not a member of the agreement, but it is participating in the current meeting, which began May 20. The major topics under current discussion are enlargement of and financing of the buffer stock.

COMPUTER '75—*At U.S. Trade Center in Stockholm, Arvo Weiksar (right), Varian Data Machines, explains V-70 series computer system during recent exhibition.*

Computer '75 Sets Highwater Mark At U.S. Trade Center For Scandinavia

Continued high interest in U.S. data processing equipment was demonstrated during the "Computer '75" show at the U.S. Trade Center for Scandinavia in Stockholm. This March exhibition celebrated the tenth year of the Trade Center and was the most successful in its decade of trade shows.

The exhibition, which attracted more than 1,800 visitors from Scandinavia as well as some from other European countries, presented displays by 80 manufacturers of minicomputers, peripherals and accessories. Products included terminals, programmable terminals, printers, plotters, modems, multiplexers, data graphic equipment, minicomputers, programmable calculator, memories, disk systems, cassette and magnetic tape systems, tape transports, interface boards, card punches, card reader, paper tape readers, data set tester, parallel data processor, character recognition system, digitizer tablet, calculator/converter, and micro program controller. Of the approximately 100 products shown, 85 percent—including products in all categories above—attracted good or very good product interest. The basic causes of poor interest toward a few products were their late arrival at the exhibition or because the product is approaching the final stage of its life cycle.

The success of this exhibition reflects the dynamism of the Scandinavian data processing market, especially in Sweden. Last year's Swedish imports of computers and peripherals were up 61 percent to $240 million, and electronic calculators were up 51 percent to $28 million, sizable increases even if the general inflation rate of 11 percent or more is deducted. The U.S. market share of computer and peripheral imports was up from 29 percent in 1973 to 31 percent in 1974 for $75 million; by comparison, the market share for France was at 23 percent while Germany's dropped from 21 to 17 percent.

Exhibitors and customers both are seeing that the sharp U.S. dollar depreciation against the krona recently is enabling U.S. industry to price competitively. Thus Sweden appears to be in step with other European countries experiencing an increasing dominance by U.S. products in several computer equipment areas.

Sweden also exports computer peripherals, auxiliary equipment and accessories; these exports increased 42 percent to $161 million in 1974. Consequently there is also a growing market for imported components. The U.S. supplied 46 percent (valued at $32 million) of 1974 Swedish semiconductor imports.

An additional factor favoring continued growth of data processing equipment in Scandinavia is the high cost to employers of wage and social benefits for employees. Thus, all equipment with a potential for saving personnel has a special attraction.

U.S. manufacturers of computer equipment normally operate in all Scandinavian countries through an agent/vendor who can provide a complete system to the end-user. Thus it is significant for continued growth of U.S. sales that 15 new agency agreements were signed during Computer '75 and 40 were under negotiation.

U.S.-PRC Business Up At Canton Spring Fair

The recently concluded Spring Fair at Canton in the People's Republic of China saw Sino-American transactions rise to a level of $60 to $65 million despite a decline in total business transacted. More U.S. firms than ever were represented.

The Chinese Export Commodities Fair held each spring and fall in Canton is China's chief export attraction, bringing visitors from many countries. American purchases are estimated by members of the commercial staff of the United States Liaison Office in Peking to have run $35 to $40 million and, although Chinese exports are emphasized at the Fair, U.S. sales rose to $25 million, a new high.

About 440 Americans representing some 275 U.S. firms, half of them newcomers to the China trade, were in attendance. Large commodity transactions predominated as 5 percent of the firms concluded 80 percent of the business. Contracts for Chinese tin, bauxite, antimony, graphite, fluorspar, tellurium, columbite and mercury were noted, although these metals and minerals may not all be delivered to U.S. destinations. Also noteworthy was the increased Chinese willingness to meet American requirements for private labels in apparel and make other modifications to suit the U.S. market.

On the selling side, chemicals were the most attractive. At least 25 U.S. firms made technical presentations on commodities and equipment to the Chinese and two firms were invited to Peking after the Fair, always a good business sign.

U.S. Exhibition Results In Brief

The following summary reports have been received on U.S. overseas commercial exhibitions. Further details and marketing data will be published as available.

Microelectronics. U.S. Trade Center, Frankfurt, April 8-10. Joint Export Establishment Promotion (JEEP) presentation. Exhibitors, 5 new-to-market firms. Immediate sales, $46,000; 12-month projection, $1.3 million. Agency appointments under consideration, 4.

Pollution Control. U.S. Trade Center, Frankfurt, April 22-25. Participants, 39, representing 51 companies. Floor sales, $17,455; 12-month projection, $9.5 million, including $5.1 million by new-to-export or -to-market firms. Representatives appointed, 1; under negotiation, 48.

Airconditioning & Refrigeration Equipment. U.S. Trade Center, Frankfurt, May 12-16. Exhibitors, 18, representing 20 firms. Floor sales, $54,500; 12-month projection, $3.6 million, including $1.9 million by new-to-market or -to-export firms. Agreements under negotiation, 12.

Worldwide Business Outlook

India Policy Toward Trade Aids Importers, Investors

A continued high level of Indian imports is foreseen for 1975-76 by Anthony Wallace, Commercial Attache at the U.S. Embassy in New Delhi, in spite of a $1.3 billion trade deficit incurred during the previous year. A recently announced new import policy stresses export promotion as a means of redressing the deficit, rather than import substitution. This confidence on the part of the Indian Government is based on projections of increasing exports and expectations of substantial balance of payments credits from OPEC countries and the IMF.

Total Indian imports are expected to range between $5 and $6 billion during the next year, with food, petroleum and fertilizer continuing to constitute the bulk of foreign purchases. Other imports are budgeted at approximately $1.7 billion for 1975-76, somewhat higher than last year. Raw materials and components for industries producing non-luxury goods will be provided a slightly larger foreign exchange allocation than last year.

The raging inflation, which saw the wholesale price index climb at a rate of 30 percent last year, has been sharply reduced and may not exceed 10 percent. The government's credit squeeze, however, curtailed plans for new investment in key industries, such as textiles. With a more liberal credit policy, industrial growth is expected to accelerate in the coming year, aided by increased availabilities of electric power, coal, cement and steel. For production gains to be substantial, other bottleneck areas, such as transport and the labor relations climate, will have to improve.

In calendar year 1974 U.S. exports to India reached $722 million, an increase of 28 percent over the previous year. Sales of foodgrains and fertilizer made up more than half of this figure. As in the previous year, almost all U.S. exports were on a commercial basis. Indian exports to the United States increased by 25 percent to $570 million and the United States remained India's best customer. The U.S. share of India's import market was 18 percent in 1973 and about the same in 1974.

Promising product categories for U.S. exports to India include railroad equipment, mining, mine plant processing, and earthmoving machinery; petroleum exploration equipment; telecommunications; electronic components; process control instrumentation; chemicals; fertilizers and pesticides. There appears to be a sizable unsatisfied demand for textile machinery and large-size power generation equipment, but during the past year foreign exchange has not been allocated for these.

During 1974 a Department of Commerce-sponsored trade mission (mining and earthmoving equipment) visited India and identified good near-term sales prospects. Additional missions and catalog shows in other fields are planned.

A recently completed analysis of India-U.S. trade over five years (1969-73) indicates that many U.S. products are no longer commercially competitive because of the absence of AID commodity loan programs which financed their import before 1971. Sales decreases were notably in iron and steel products, crude inedible materials, non-ferrous metals, agricultural, textile, and metalworking machinery, and miscellaneous manufactured articles. India has, to some extent, switched to suppliers of these products who are able to offer long-term (more than 20 years) financing at concessional interest rates.

U.S. products are favored

Because of quality and price competitiveness, however, U.S. products continue to be favored by Indian end-users. Export-Import Bank financing is available to facilitate sales. This year, given the larger amount of free foreign exchange which will be available for imports, sales prospects of some U.S. items which formerly lost ground should improve.

Government state trading agencies such as the State Trading Corp. (STC) and the Minerals and Metals Trading Corp. (MMTC) continue to increase their participation in both import and export trade. For all dealings in India, whether with government agencies or private buyers, most firms who have had experience in India agree on the need for a competent local agent. The agent will prove useful in reporting and negotiating on trade opportunities and in following up with import licensing authorities. More than 2,000 U.S. firms maintain agency representation in India.

Foreign investment is welcomed in selected areas. Although the economic situation and tight credit conditions have led to postponement of some projects, there is no shortage of proposals for joint ventures with foreign firms, involving both private and public sector Indian partners. The number of U.S. collaborations, particularly licensing arrangements, has risen steadily during the past two years. There are currently about 400 such collaborations in India, some 120 of which involve U.S. equity participation. The U.S. share of total foreign investment in India is about 27 percent, second only to the U.K. share of 40 percent.

There have been no significant revisions of the investment policy guidelines set forth by the government in early 1974. Foreign equity participation in most ventures (except those in the "core" or priority sector or those which export more than 60 percent of production) is limited to 40 percent. The government is particularly interested in attracting industries to India which will export 100 percent of production, using local materials to the maximum extent possible. Real progress has been made in clearing the backlog of investment applications. A foreign investor can now expect to know within three to four months whether his proposal is acceptable. Licenses are being issued within six months to one year from date of application, compared to two to three years in the past. The government continues to judge foreign investments on (1) their capacity to earn foreign exchange through exports; (2) the ability to save foreign exchange by investment in areas which will reduce India's imports; and (3) the extent to which needed technology is transferred to India.

Although some U.S. firms have experienced administrative delays in approval of dividend remittances, the policy of the government is still to avoid restrictions on repatriation of earnings. Some firms have experienced difficulties in expanding or diversifying their operations in India, especially when the local partner is one of the large industrial houses. There is also some stiffening of the terms under which licensing agreements can be renewed and there is some downward pressure on the maximum permissible level of royalties and technical fees. There are no indications that the government intends to nationalize additional sectors.

India offers the foreign investor a large and growing market; well-developed infrastructure facilities; extensive natural resources, especially minerals; a well-established domestic capital market; competent managers and plentiful skilled labor, and relatively low wages. The past record of the profitability of foreign business investments in India indicates that a company willing to operate within the government guidelines can do well. Investments which gain relatively speedy approval and enjoy smooth operations in India tend to be those which offer needed technology in a priority area, promise exports, enlist a well-regarded local partner, and maintain a minority foreign equity. The balance between foreign exchange outflows from India (occasioned by remittance of dividends and royalty payments and import of machinery) and inflows (exports and import substitution benefits) should generally be in India's favor. Tie-ups with central or state government entities are especially desirable, and several U.S. firms have entered into such ventures.

Some of the most promising sectors for investment include offshore oil exploration and development, coal gasification and liquefaction, electronic components, chemicals, processing and beneficiation of mineral ores, and industrial instrumentation. Foreign participation in oil exploration does not extend to production sharing. The two American groups which have recently signed contracts will explore at their own risk and receive compensation plus an agreed rate of return if commercial deposits are located.

India Offers Good Prospects For Leather Machinery Sales

The Indian Government is encouraging development of a leather finishing industry and, at the same time, imposing quota restrictions on exports of semi-finished hides and skins, in order to achieve a higher level of foreign exchange earnings.

Leather processing and finishing (LPF) machinery and technical know-how deemed essential to achieve these objectives are granted import licenses readily. India has only three firms capable of producing LPF machinery and the annual output does not exceed $500,000, mostly of the simpler type. Joint ventures and licensing agreements to manufacture sophisticated LPF machinery will be considered by the Indian Government on a case-by-case basis.

Past imports, mainly from Europe, have averaged $500,000 yearly, but demand through 1979 is projected at $8 million per year.

At least 13 firms have registered their intent to purchase LPF machinery and have received permission to import sophisticated production materiel. A complete list of these potential customers is available from the South Asia Division, OIM/BIC, U.S. Department of Commerce, Washington, D.C. 20230, 202-967-3137.

U.S.-Romania Unit Meets, Endorses Trade Agreement

The second meeting of the Romania-U.S. Economic Council, concluded in Washington May 30, produced an optional conciliation procedure for the prearbitral resolution of commercial disputes. Council members also strongly endorsed the Agreement on Trade Relations signed by the governments of the two countries April 2, and the principle of nondiscriminatory (Most-Favored-Nation) treatment, which is an important part of the Agreement (now pending Congressional consideration). They further urged reactivation of Export-Import Bank lending for Romania. Gabriel Hauge, of Manufacturers Hanover Trust, New York, is chairman of the U.S. section of the council.

Bangladesh Moves To Improve Trade, Investment Scene

Bangladesh offers significant opportunities for American exporters despite its economic problems, according to Lawrence N. Benedict, Consular Officer at the U.S. Embassy in Dacca.

The Government of Bangladesh took several steps during 1974 to improve the investment climate and to increase the scope for private sector importers. The government has made clear its interest in attracting foreign private investment, both in its public pronouncements and actions during the past year. But the chronic shortage of foreign exchange and other serious economic problems remain, Benedict adds.

In January the United States and Bangladesh concluded an Overseas Private Investment Corporation (OPIC) bilateral agreement, opening the way for OPIC coverage in Bangladesh. This agreement, the government's new investment policy announced in July 1974 (available in summary form from the Bangladesh Embassy in Washington) and its decision to allow several foreign companies to remit profits and/or dividends, have been major contributions to a gradually improving climate for foreign private investment. Partly as a result of these actions, five foreign firms (including three U.S.) recently submitted investment proposals to the Government of Bangladesh.

Potential investors are required to submit a formal application, outlining in detail their investment proposal, to the Investment Board of the Government of Bangladesh. The current limit on private investment is Taka 30,000,000 (approximately $3.75 million), but the government has expressed interest in attracting foreign participation in several large-scale projects, including fertilizer and chemical manufacturing.

On the trade side the government continues to allocate a large portion of its foreign exchange to the import of essential commodities such as food, fuel and fertilizers financed primarily by multilateral and bilateral aid. In addition, the government will buy significant quantities of ferrous scrap, iron and steel billets, industrial spare parts, chemicals and tube-well drilling equipment during 1975. The government makes most of its purchases by international tender. A good local agent can keep an American firm informed of relevant tenders.

Bangladesh is and probably will remain short of foreign exchange; an especially severe shortage was experienced in mid-1974, and restrictions were placed on importing in addition to the normal import licensing requirements. Some of those restrictions have not yet been lifted and obtaining import licenses remains very difficult. In most cases the government is insisting on 180 to 360-day supplier credits for licenses. Import licensing requirements and other import restrictions are likely to remain in effect indefinitely.

Despite the foreign exchange situation, the government has taken some actions to encourage private importers. One of the most important is revision and expansion of the Wage Earners Scheme. The government has expanded and simplified this program dramatically during the past year and is currently projecting imports of over $60 million per year under this plan (total projected imports are about $1.2 billion, and non-aid financed imports may amount to about $400 million). The Wage Earners Scheme allows Bengalees earning or holding money abroad to remit goods to Bangladesh which may be sold without price or distribution restrictions, enabling them to realize local currency returns higher than the official exchange rate would allow on the money sent.

As an adjunct to the Wage Earners Scheme the government has eliminated import duties on several items imported under this program. In a particularly significant step, the government has decided that importers of milk, food, coconut oil, tires, tubes and motor vehicle spare parts under the Wage Earners Scheme will be given import licenses for an equal amount against free foreign exchange as an incentive to import these items.

In addition to chronic shortages of foreign exchange Bangladesh is faced with other major economic problems: an over-large and rapidly growing population; unemployment/underemployment of as much as 40 percent of the work force; a river system that makes land transportation extremely difficult, especially during the monsoon season; severe shortages of industrial raw materials and spares which seriously hamper manufacturing; and rapid inflation. These and other serious problems limit the government's ability and willingness to divert foreign exchange from purchases of food and other essential commodities.

In spite of these severe economic difficulties there are growing markets in Bangladesh for some American products and services. American products enjoy a very good reputation in the marketplace. An aggressive local agent is a definite advantage. Occasional visits by regional representatives will almost certainly lead to better understanding of the business environment in Bangladesh and, hopefully, to increased future sales. Finally, extended (180 and 360-day) credit terms almost always influence the buying decision, at times overcoming lower prices.

Ethiopia Rapidly Being Transformed; U.S. Products Are Still In Demand

Some of the most radical changes in Ethiopia's political and economic structures this century have taken place recently. The U.S. Embassy in Addis Ababa has prepared the following report on these developments and their implications for U.S. business.

Following the deposition of the Emperor, dissolution of parliament, formation of an Ethiopian Provisional Military Government and the launching of a campaign to send 60,000 students into the countryside, the new government announced on Dec. 20 that Ethiopia would adopt an economic program of "Ethiopian Socialism". On Jan. 1 it nationalized banks and insurance companies. On Feb. 3 it issued a declaration of economic policy, slightly amended on Feb. 7, which announced the complete nationalization of 72 firms and partial nationalization of 29 others, the latter including four U.S. firms. The 101 firms included flour and oil mills, breweries, soft drink bottlers, textile plants, tanneries and leather factories, printing plants, some chemical and metal plants, a power utility, oil distribution companies, wood and paper plants and a large segment of the food processing sector.

Compensation being determined

Most small-scale businesses and industries and trading establishments were not affected. The declaration stated that affected companies would be compensated "in accordance with a law to be promulgated" and that a committee would be formed to determine the amount of compensation. The committee has since begun its deliberations and new managers, generally young and well-educated, have been appointed to most of the nationalized firms.

On March 4, the government proclaimed land reform, with all rural land, including commercial as well as small-farm holdings, nationalized. It announced that no compensation would be paid for land or crops, but that appropriate compensation would be paid for movable properties and permanent improvements. Individual families could obtain up to 10 hectares (about 25 acres), but could also form "Peasants Associations" to farm larger areas communally, the minimum being 800 hectares.

Thus, the Ethiopian economy is rapidly being transformed from predominantly private enterprise-oriented to a socialist system.

Partly as a result of these actions and ensuing business uncertainty, prospects for growth in 1975 appear uncertain at best. During recent years, GNP in real terms grew by an average of 6 percent. From all indications, GNP growth in 1974 was probably no greater than 2-3 percent. While it is still too early to predict with any degree of accuracy, there is some question whether 1975 will see any increase at all.

Manufacturing output, which held up in 1974 pretty much at 1973 levels, reportedly fell by 2-3 percent during the first two months of this year. This seems to be confirmed by electric power consumption, which fell by about 5 percent during January and February. Turnover in the wholesale and retail trades, which already started to decline as 1974 progressed, is generally down by anywhere from 10-50 percent compared to the first part of last year. In a few areas such as textiles, where industry is already running at virtually full capacity, demand exceeds production. By contrast, construction activity, which in mid-1974 had declined to less than half the level of a year earlier, picked up rapidly at the beginning of 1975, with the outlook for the rest of the year remaining bright.

Overall consumption of petroleum products, which in 1974 was down by about 5 percent compared to the previous year, declined by another 10 percent or so this January and February. Consumption of aviation fuel dropped even further, reflecting a sharp drop in tourism and consequent loss of domestic and international passenger traffic.

In 1974, employment declined considerably over the previous year, but has now leveled off as a result of the government's forbidding employers to lay off workers. Private investment activity, which began slowing in 1974, has now come to a virtual standstill.

In 1972, Ethiopia's balance of payments on current account showed a small surplus of $9 million for the first time in over a decade. This surplus increased to just over $77 million in 1973 and by mid-1974 had risen to $107 million. However, as a result of a substantial increase in imports and a decrease in exports during the second half of the year, the overall balance of payments surplus for 1974 was somewhat lower.

Ethiopia's export performance will be a major factor in determining its balance of payments position in 1975. Latest available figures show that for the first nine months of 1974, exports amounted to $230 million, compared to $183 million for the same period in 1973, with imports amounting to $225 million and $156 million for the corresponding periods. Thus, while exports grew substantially (just over 25 percent), imports grew even more rapidly (45 percent). Year-end figures for 1974 will probably show imports and exports roughly in balance or in slight deficit.

Since then, unfortunately, prices for most of Ethiopia's principal export commodities have been falling. It is too early to say what the effect of land reform on this year's harvest will be, although a decrease in overall production appears almost inevitable. Nevertheless, production of export crops such as sugar, pulses and cotton will probably be close to or slightly exceed last year's record levels. An export surtax recently imposed by the government on Ethiopia's principal agricultural exports will probably act to reduce exports as well.

On the basis of import performance thus far this year, overall Ethiopian imports will probably decline from last year's levels. Happily, Ethiopia's oil import bill, which rose from about $20 million in 1973 to an estimated $40 million in 1974 ($31.5 million if petroleum exports of $8.5 million are deducted), is not expected to increase substantially in 1975. Nevertheless, in view of the continuing decline in agricultural commodity prices, 1975 will in all likelihood see a modest balance of trade deficit.

Foreign exchange position

At the end of 1974, Ethiopia's net foreign exchange holdings amounted to about $300 million, the equivalent of approximately 14 months' import cover. Since then, these holdings have declined by about $4-5 million, but still are about three times the 1969-73 average. Foreign exchange holdings are expected to decline further through 1975, but probably will not drop below $250 million or one year's import cover.

By December of last year, the Addis Ababa retail price index had risen by just over 6 percent over the level of December 1973. This index is heavily weighted towards food, however, and the average increase for items such as clothing, household goods, medical and personal care was closer to 8 percent. As a result of price controls imposed in recent months, the increase in 1975 will probably be no greater than last year's.

Despite a change of government and restructuring of the country's economy, telecommunications, trucks and farm equipment remain major targets for U.S. trade promotional activity. As part of Phase I of Ethiopia's Fifth Telecommunications Development Program, a tender for Ethiopia's first communications satellite station, originally scheduled for last year, is now expected to go out in mid-1975. Bidders will be given a full three months to submit bids. In addition, the issuance of tenders for construction of microwave links between Tessenei and Asmara, Dessie and Assab and Shashemane and Moyale appears imminent. Total cost of this phase, which ends in 1976, is over $37 million, two-thirds of which is foreign exchange costs. Phase II (1977-78) calls for expenditure of an additional $17 million on a variety of telecommunications projects.

With increasing control of the economy by the central government, authorities, including the new Ministry of National Resources Development, will require large numbers of new trucks. Although Fiat is now beginning to assemble trucks and four-wheel drive vehicles, demand and backlog of orders remains substantial.

As the government seeks to develop local farming into larger, more rational units, it will also require substantial quantities of farm machinery. This is a market, however, that will probably take several years to develop.

About half of Ethiopia's capital budget is financed by foreign development assistance; foreign aid donors continue to see Ethiopia as a principal target for such assistance. Last year, new loan and grant commitments were well over $100 million, with more than half that amount allocated to infrastructure. These commitments, at somewhat lower levels, are expected to continue over the near term.

Despite nationalization of most key industries, the new government stated in its Feb. 7 Declaration of Economic Policy that foreign private investment would be most welcome and guaranteed adequate returns in areas such as exploration and exploitation of carbons and hydrocarbons, mining of ferrous and non-ferrous metals and production of chemicals and fertilizers. However, the government would assume a 51 percent shareholding in any such venture. Exploitation of precious metals and radioactive materials is now exclusively reserved for the state.

During the past year, prospects for oil and copper exploration dimmed somewhat as Tenneco halted oil exploration activities and withdrew, along with Nippon Mining, from its copper concession in Eritrea. While the Polar Bear Group has also withdrawn from its concession, Whitestone/LLE and Shell are continuing their oil exploration activities.

U.S. Office At Leipzig Unveils Opportunities

The U.S. Business Development Office at the Leipzig Fair in March was the first official U.S.-sponsored trade promotion event ever held in the German Democratic Republic. The booth displayed catalogues of the U.S. machine tool and materials handling industries and was staffed by a representative of each industry—John Connor of the National Machine Tool Builders Association and Gregory Schultz of *Factory* magazine, in addition to the Deputy Director of the Department of Commerce's Vienna East-West Trade Center, Henning Vontillius. To supplement the catalogue showing, the two industry experts gave slide and lecture presentations on U.S. technology and systems in their fields.

The office was exceptionally well received and was visited by GDR Party Chief Erich Honecker, Chief of State Stoph, and Head of the Council of Ministers Sindermann. A heavy volume of visitors from the GDR technical, scientific, and foreign trade communities also visited the booth.

GDR representatives expressed keen interest in U.S. lift trucks of all kinds; automatic, high-rise, stacker-crane warehouse equipment and systems; work station hoists under 5 tons capacity; intermodal containerization; and high-speed steel and carbide cutting tools. They were also interested in a number of other areas including conveyors, pallets, storage devices, bridge cranes, and refrigeration systems for plants, warehouses, and highway trucks. In turn, they expressed interest in exporting GDR strip-mining equipment and technology to the United States.

Further information may be obtained from the Commerce Department's Bureau of East-West Trade, Trade Development Assistance Division, 202-967-2835.

Information on importing equipment and material from the German Democratic Republic or otherwise entering into export or import arrangements with that country may be obtained from Lothar Stragies, GDR Commercial Attache to the United States, 202-232-3134.

Five U.S. Exporters Accused Of Violating Boycott Report Law

Five U.S. exporters have been charged with violating the Export Administration Act of 1969 for failing to report requests to participate in the Arab boycott of Israel, the U.S. Department of Commerce has announced. The companies were previously warned of a similar violation in 1968-1969. Under Export Administration regulations issued pursuant to the Act, they have 30 days in which to contest the charges or agree to the imposition of a sanction.

The Department also announced that 44 U.S. exporters have been warned that they are violating a mandatory provision of the Act either through inadvertence or through unfamiliarity with the reporting requirement, and will face charges if the violation recurs.

Both charges and the recent warnings result from Commerce Department investigations. The firms involved were not named.

Under the regulations, U.S. exporters are required to report to the Commerce Department any requests for participation in international boycotts or other restrictive trade practices. The regulations provide that the responsibility to report is that of the exporter. However, individuals and organizations handling any phase of an export transaction, including freight forwarders, shipping companies and banks, also share responsibility for communicating such information to the exporter, whose report is then submitted to the Department of Commerce.

Calendar For World Traders

June 13—Chicago—International Trade Club luncheon program, La Salle Hotel. Subject: Washington International Business Decision-Making. Speakers: Robert McLellan, vice president, FMC Corp., and Richard A. Hoefs, partner, Arthur Andersen & Co.

June 16—Boston—International Center of New England seminar. Speaker: Tilton H. Dobbin, Asst. Secretary of Commerce for Domestic and International Business.

June 16—New York—Beginning of summer semester of Evening School of World Trade, World Trade Institute.

June 16-18—New York—Seminar presented by Institute for Mid-East Cultural Communication, Plaza Hotel. Topic: Increase Your Effectiveness in Business with Arab Nations. For information, 609-599-2772.

June 17—New York—FCIB Hardware-Automotive & Allied Trades Group luncheon meeting, Advertising Club.

June 19—Pittsburgh—Robert Morrison College business seminar. Forest E. Abbuhl, Director of Commerce's Office of International Trade Policy, will discuss the Trade Act of 1974.

June 19—New York—FCIB Drug, Chemical & Food Export Club meeting, Advertising Club.

June 25-27—New York—Seminars on business opportunities in Indonesia, Malaysia and Singapore, American Management Associations. Speakers include C. Melvin Sonne of Commerce's Office of International Marketing.

June 26-27—Ann Arbor—Seminar on Auto Parts Markets. Sponsors: Institute for International Commerce of the University of Michigan, Commerce Detroit District Office. For information, Frixos G. Massialas, 313-763-1387.

Worldwide Business Opportunities

International trade specialists in the Department of Commerce and Foreign Service Officers in the U.S. Embassies and Consulates around the world are continually developing specific commercial opportunities through which American companies can find buyers, agents, partners or investors abroad. One of the major means for communicating these opportunities promptly and accurately to the U.S. business community is through the columns of this magazine.

The section that follows presents details about upcoming trade exhibits and trade missions, licensing and joint venture proposals, opportunities to sell to foreign enterprises and appoint agents, and details on major construction and expansion projects.

U.S. Promotions Abroad

For more facts on these and other U.S. exhibitions write: Director, Office of International Marketing, Rm. 4015, U.S. Department of Commerce, Washington, D.C. 20230. For trade missions: Rm. 4219, U.S. Department of Commerce, Washington, D.C. 20230.

Industrial Security and Safety Equipment Exhibition. U.S. Trade Center, Mexico City. July 28- Aug. 1. Mexican consumption of security and safety equipment has been growing at an annual rate of 13.5 percent. Market demand is met primarily by imports because Mexican production is limited to basic equipment. Mexican customers prefer U.S.-made equipment, and the U.S. enjoys a 50 percent share of the growing Mexican market for industrial security and fire protection equipment. Call Fred Tower, 202-967-3636.

Ocean, Marine Instrumentation Exhibition. U.S. Trade Center, Tokyo. Aug. 4-8. Japan's small size and the virtual absence of exportable deposits of natural resources have caused the Japanese to expend considerable resources in investigating potential of the ocean. The current Japanese budget for ocean research and development totals $99 million. The private sector is expected to commit approximately $127.7 billion between 1970-80. Particular attention is being directed toward offshore oil and natural gas exploration. Bob Watkins, 202-967-4057.

Aviation Electronics and Ground Support Equipment Trade Mission To Nigeria and Botswana. Aug. 4-18. Sales of all communications and flight instrumentation commonly found in civilian aircraft, and all terminal support equipment, as well as products used to test and service aircraft and aircraft engines, will be promoted. The two countries give high priority to airport and related electronics and ground support equipment in their development plans. Nigeria has a massive airport expansion program and abundant foreign exchange from oil revenues. Copper is the keystone of the economy of Botswana. Bill Bushwaller, 202-967-4511.

Advanced Building and Construction Equipment Exhibition. U.S. Trade Center, Mexico City. Sept. 1-5. The Mexican market for building and construction machinery and equipment is growing at a rate of 11 percent per year. U.S. equipment, which enjoys an image of very good quality backed by good service, traditionally commands a 50 to 60 percent share of the total market for this equipment. An ambitious national housing plan calls for construction of 50,000 low-cost homes by 1977. Call Mary Wiening, 202-967-5037.

Business Equipment, INTERORGTEKHNIKA-75, International Exhibition. Moscow. Sept. 2-16. Soviet imports of business equipment from the industrialized West have tripled since 1967 and are expected to increase another 66 percent by 1977. Soviet specialists regard the U.S. as the world's foremost producer of modern business equipment. Jim Robb, 202-967-4810.

Food and Tobacco Processing. International Fair, Plovdiv, Bulgaria. Sept. 3-10. Agriculture accounts for 25 percent of the Bulgarian GNP and over 30 percent of exports. During the next year Bulgaria intends to spend $220 million in modernization and expansion of plants and facilities, and is anxious to use American technology and equipment to help improve output and efficiency. Cooperation with foreign firms is now possible and encouraged. Joseph Eblan, 202-967-5163.

Instruments and Controls for Science and Industry. U.S. Trade Center, Tehran. Sept. 7-11. Iran's current national Development Plan projects about $22 billion in investment for instrument and control related fields from 1973-78. Foreign exchange earnings are expected to reach $18 billion, while imports jump to $10 billion in 1974-75. The instrument and control market is expected to multiply more than 2½ times by 1978, to $168 million. The U.S. share of imports of instruments and controls into Iran is around 19 percent against Germany's 22 percent. Karl Reiner, 202-967-4441.

Packaging Machinery and Equipment (Joint Export Estab. Program—JEEP). U.S. Trade Center, Taipei. Sept. 8-11. Scheduled to coincide with the annual convention of the China Packaging Institute in Taipei. Commerce market research indicates that Taiwan's demand for imported packaging machinery will reach $12.5 million in 1977, a substantial increase over 1974 imports of $9.8 million. Roy Mitchell, 202-967-2051.

Electro-Optics Instruments and Systems Exhibition. U.S. Trade Center, London. Sept. 8-12. The relevant British market is currently $9.6 million. This market offers important opportunities to aggressive U.S. companies with state-of-the-art products/technology to sell. Demand is high for optical production components and testing instruments; lasers and laser systems; holography, and fiber optics. Irwin D. Nathanson, 202-967-4462.

Pollution Control Equipment Exhibition. U.S. Regional Trade Center, Singapore. Sept. 9-12. Air, water and oil pollution control equipment and instrumentation will be featured at this first U.S. exhibition of pollution control equipment in Singapore. Potential buyers from the surrounding countries of Malaysia, Indonesia, the Philippines, Thailand and Hong Kong will attend the exhibition and technical seminar. Rapid off-shore oil development, heavy oil tanker traffic and increasing concern for environment in the area, make this a propitious time to exhibit. Joe Payne, 202-967-3893.

Process Controls and Material Test Equipment. International Fair, Brno, Czechoslovakia. Sept. 10-18. Czechoslovakia is one of the most industrialized countries of Eastern Europe and presents a large market for controls and test equipment, especially in the chemical, textile and food processing industries. The Brno Engineering Fair is one of the largest in Eastern Europe, with annual attendance of over 400,000. Buyers from all of the COMECON countries typically attend this event. Jim Bushery, 202-967-5163.

Printing and Graphic Arts Catalog Exhibit. Zagreb, Yugoslavia. Sept. 12-21. The Yugoslav market for printing and graphic arts equipment is expected to reach $19 million by 1977. A shortage of skilled labor has increased demand for more advanced technology and has stimulated purchase of all types of automated printing equipment. The printing industry in Yugoslavia is almost entirely dependent upon imported products. Will be conducted within a USIA exhibit at the Zagreb Fall Fair. Robert E. Peterson, 202-967-3973.

Fluid Power Technology. U.S. Trade Center, Paris. Sept. 15-18. U.S. manufacturers have an exceptional opportunity to increase sales and establish representation or other business relationships in the French market. Many new factories are being constructed and old ones modernized. Due to rising labor costs, French management is seeking methods of improving manufacturing processes and automating operations. In 1974, French purchases of hydraulic and pneumatic equipment and parts were $372 million. Imports accounted for about 51 percent of the French hydraulic market and 56 percent of the pneumatic market. Bill Dawson, 202-967-4941.

Plant Engineering and Maintenance Catalog Exhibit. Earl's Court, London. Sept. 15-19. British industry is estimated to be spending approximately $800 million annually on maintenance and replacement of plant facilities. This catalog exhibit in PEMEC will feature products, systems and services designed to cut the cost of manufacturing by maintaining plant facilities and production machinery and equipment in first-class operating condition. Because of rising labor costs, firms in the United Kingdom are also using outside cleaning contractors more often. These contracting firms are now offering extended services to include complete janitorial coverage. The total annual turnover of the cleaning and building maintenance industry is estimated in excess of $500 million. Robert E. Peterson, 202-967-3973.

Printing and Graphic Arts Equipment. U.S. Trade Center, Sydney. Sept. 15-19. The Australian market for printing equipment has expanded from $33 million in 1972 to $54 million in 1974, almost all imports. U.S. exporters are in a good position to increase their share in the face of British and German competition. Phone 202-967-2963.

Design Engineering Catalog Exhibit. Harumi, Tokyo. Sept. 16-21. Next to the United States, Japan has the largest original equipment market in the world, estimated at $50 billion. With recent easing and lifting of trade restrictions on materials, parts, components and finishes, now is the time for U.S. manufacturers to show their products to Japan's design engineers. This catalog exhibit at DES '75 will promote materials, parts, components and finishes that contribute to final product, and technology needed to increase efficiency, productivity and economy in the manufacturing process. Robert E. Peterson, 202-967-3973.

Electronic Components. Stockholm Trade Center, Sept. 22-25; Frankfurt Trade Center, Sept. 30-Oct. 3. U.S. manufacturers and suppliers of electron tubes, solid state devices including transistors, integrated and other semi-conductors, capacitors, resistors, connectors, switches and other passive components may participate in one or both events in this "tandem" exhibition. The U.S. is a leading supplier of electronic components in Sweden. A 10 percent annual rate of increase in Sweden's imports of electronic components is expected through 1977. German imports of electronic components are forecasted to reach $510 million by 1977. Both countries' growing requirements for advanced components, coupled with their need to establish additional sources of supply, will enhance prospects for further U.S. market penetration. Maurice A. Peter, 202-967-4256 or Mike Frisby, 202-967-3748.

Fluid Power Exhibition, U.S. Trade Center, Milan. Sept. 23-27. U.S. products dominate the Italian market in high technology hydraulic equipment, especially that needed for applications requiring pressure of over 2,000 P.S.I. The squeeze on profit margins and high labor costs have further stimulated interest among Italian firms and the market is expected to exceed $200 million by 1976, of which $60 million will be imported. U.S. products with high sales potential include hydraulic pumps, motors and valves, servo-systems, gauges and indicators, pressure transducers and rotary compressors. John Priamou, 202-967-2434.

Advanced Business Equipment Exhibition. U.S. Trade Center, Mexico City. Sept. 29-Oct. 3. Mexican consumption of modern business equipment has increased at an annual rate of 10 percent, reaching almost $90 million in 1974. Imports meet more than two-thirds of total Mexican demand for business equipment, and U.S. manufacturers supply 53 percent of total imports. Vigorous growth in sectors such as petroleum, steel, tourism, banking and government administration insures that demand for this equipment will remain high. Phil Christenson, 202-967-5038.

Magasin General In-Store Promotion. Tunis. Sept. 29-Oct. 7. Magasin General, Tunisia's leading department store, will hold a special promotion of U.S. consumer goods in Tunis this fall. Tunisia is approaching one billion dollars as an import market, with a healthy economy fueled by increased production of petroleum and phosphate. Magasin General is interested in buying U.S. housewares, giftware, costume jewelry, cosmetics and beauty products, among other categories. The U.S. buying office for Magasin General is Retailers Representatives, Inc., 1372 Broadway, New York, N.Y. 10018. Charles E. Johnson, 202-967-4705.

Advanced Medical Equipment Exhibition. U.S. Trade Center, Tokyo. Oct. 6-9. By 1976, Japan will be importing $67 million of biomedical equipment, 50 percent or $34 million of which will come from the United States. Now is an excellent time for U.S. manufacturers of advanced medical equipment to take advantage of Japan's efforts to increase its medical research programs, improve rural health care delivery systems, and expand facilities for the aged and those afflicted with pollution-related disease. John Wolf, 202-967-2461.

Agricultural Machinery and Equipment Trade Mission to Brazil, Venezuela and Colombia. Oct. 6-17. Present economic conditions are extremely favorable for the sale of a wide variety of agricultural machinery and equipment to these three countries. Brazil's ambitious agricultural development program has created a demand for crop and livestock production equipment that is currently growing at the rate of 38 percent per year. Since domestic production cannot keep up with this demand, opportunities for U.S. sales are excellent. Oil-rich Venezuela is likewise carrying out plans for massive increases in agricultural production. Colombia's consumption of agro-pastoral machinery and equipment, which has been growing at an average annual rate of 13.8 percent, is projected to reach $71 million by 1977. Of this total, $56 million will be imported, and the U.S. share is expected to reach $11.8 million. Ed Oliver, 202-967-3746.

Food Production/Storage/Processing/Packaging Trade Mission. Morocco, Kenya, Zambia, Swaziland. Oct. 6-22. This mission will promote the sale of machinery and equipment used to prepare or process food from the time it is harvested/collected until it reaches the consumer. E. Lee Carteron, 202-967-2973/4.

Nuclex '75. Basel, Switzerland. Oct. 7-11. Nuclex is the largest, most important international trade fair for the nuclear industry. When last held in 1972, it had over 320 industrial exhibitors representing 22 countries and attracted an audience of 16,000 buyers from all over the world. Mara Yachnin, 202-967-5751.

Technical Sales Seminar on Advanced Metalworking and Metal Parts Finishing Equipment, Yugoslavia. Oct. 12-17. In response to strong and growing demand for American metalworking and metal parts finishing equipment in these countries, Commerce will arrange a seminar for seven American manufacturers. There will be seminar presentations in Belgrade and Zagreb to discuss the state of the art in the U.S. and hold discussions with purchasing authorities. W. Bradley Tyrrell, 202-967-5285.

Medical and Laboratory Equipment Exhibition. U.S. Trade Center, Sydney. Oct. 13-17. Sophisticated American medical and laboratory equipment garnered better than 32 percent of the Australian import market during 1974. The continuing technological superiority of American products, their accepted high quality, and recent Australian Government medical expansion programs are all factors which bode well for future sales increases. Contact Don McDonough, 202-967-2461.

Air and Water Pollution Control Equipment and Instruments Catalog Exhibit. Madrid. Oct. 13-18. Sales of pollution control equipment in Spain are expected to more than double between 1974 and 1978, from more than $225 million to nearly $470 million. This catalog exhibit, to be held at the First Iberian American Congress on the Atmosphere, will stress air and water pollution control equipment and instrumentation. Manufacturers of pollution control equipment pertaining to the iron and steel industry, chemical industry, sewage treatment plants, municipal water supplies, and non-ferrous metal, power generation, cement, and the pulp and paper industries should find good exposure. Robert Peterson, 202-967-3973.

Machine Tools and Metalworking Equipment (JEEP). Seoul. Oct. 14-17. The market for machine tools and metalworking equipment is growing rapidly as Korea becomes an industrialized nation. Commerce estimates 21 percent annual growth for imports of metalworking machinery of all types for the next five years. Welding equipment, metal cutting and metal forming machine tools and quality control equipment have best sales potential. Carol A. Murray, 202-967-2215.

American Fortnight 1975. Hong Kong. Oct. 18-Nov. 2. During the American Fortnight's city-wide promotion of U.S. goods, Hong Kong's major department stores will feature American-made consumer goods. The first American Fortnight in 1973 reestablished leadership of U.S. consumer goods in Hong Kong. Special in-store promotions were held in leading stores such as Shui Hing, Wing On, Sincere, Dragon Seed and Crane Stores. This fall's expanded event will introduce and promote American products to the four million residents of Hong Kong and surrounding region. Charles E. Johnson, 202-967-4705.

Data Communications and Peripheral Equipment. U.S. Trade Center, Paris. Oct. 20-23. This exhibition is the third Commerce has sponsored in Paris for these product categories; the previous shows were large sales successes. Demand is expected to be higher than before, as rapid development of telecommunications provides excellent growth potential for data communication terminals and other EDP peripheral equipment. Special arrangements will be made for participants who wish to also attend Systems '75, Munich, Oct. 27-31. Chuck Whitley, 202-967-5381.

Nord-Air '75 Specialized Exhibition. U.S. Trade Center, Stockholm. Oct. 20-24. This is an avionics/ground support show. There is a demand for advanced products and systems created by Sweden's ongoing program for upgrading air traffic control centers at its three major international airfields and landing systems at provincial fields. To a lesser extent, there is similar activity in the other Nordic countries. Sweden's Board of Civil Aviation is investing $25 million in ground avionics plus another $8 million in machinery and vehicles alone. American-made equipment is recognized as being technologically superior. Swedish manfacturers have no significant advantage over U.S. suppliers in either costs or tariffs. William Beiring, 202-967-3276.

Hotel & Restaurant Equipment Exhibition. Taipei Trade Center. Oct. 20-24. Taiwan's Tourism Bureau forecasts that by 1980, 13,700 hotel rooms of international tourist standards will be required; there are only 4,600 such accommodations today. Planning and construction are under way for about 4,000 such units, in addition to the proliferation and upgrading of eating and entertaining facilities. Taiwan hosted over 810,000 foreign visitors in 1974, and the government is inducing the private sector to prepare now for an average annual increase of 15 percent. Taiwan will require in excess of US$5.1 million in service equipment in 1976 in categories of institutional food preparation and service, administration, housekeeping, security, entertainment and function-room equipment and supplies. Timed to provide exposure with the influx of Chinese businessmen and entrepreneurs from all over the Far East who return for October holiday festivities and cultural events each year. Dave Horridge, 202-967-2798 or 5545.

Building Materials and Construction Equipment Trade Fair. Saudi Arabia. Oct. 20-25. Saudi Arabia is faced with the dilemma of how to modernize while still preserving traditional values. Its five-year development plan will inject about $100 billion into the economy and bring half a million foreign workers into the country. Specific goals of the plan are expanded health, education, and general welfare programs; construction of over 100,000 new homes per year; continued improvement in already established transportation, port, and communications infrastructure; accelerated development of industry, especially petroleum refining and petrochemicals, fertilizers and extraction and processing of mineral resources; and expansion of agriculture. Commerce is offering a uniquely integrated approach to these developments with a trade fair of 50 firms which will include building materials manufacturing firms; construction equipment; architectural, engineering, design and planning firms; urban development firms and contractors. Franc D. Manzolillo, 202-967-2515.

Equipment for the Ceramics Industry (JEEP). U.S. Trade Center, Milan. Oct. 21-23. The market for production equipment and supplies for the ceramics industry is expected to grow from $42 million in 1974 to nearly $46 million by 1976, with imports accounting for almost 20 percent of the total. The increase will come principally from efforts to upgrade technology in certain manufacturing sectors. Italian firms are showing greater interest in the purchase of laboratory equipment and instruments for testing and quality control. Management also plans to invest in new labor-saving equipment to off-set rising wage rates. J. Michael Springmann, 202-967-4975.

Systems '75. Munich. Oct. 27-31. Systems '75, one of the world's most prestigious computer industry shows, is a biennial event open to manufacturers and suppliers of computer hardware and software, peripheral equipment, and computer services. The previous show, Systems '73, proved to be an outstanding success for the 60 U.S. exhibitors. Floor sales totaled $2.1 million with projected twelve-month sales at $146 million. Chuck Whitley, 202-967-5381.

Agriculture, Water and Food Equipment, AGWA-FOOD International Trade Fair. Tehran. Oct. 31-Nov. 6. Iran continues to be one of the fastest growing markets for U.S. exports in the world. Our exports almost tripled last year to a total of $1.7 billion. In the Iranian Fifth Plan, 1973-78, agricultural development has been assigned key priority. More than $4 billion will be invested in means to produce, process, transport and market foodstuffs. Particular emphasis will be given to increasing the area under irrigation, increasing silo capacity, expanding red meat and milk production and increasing farm productivity by formation of larger farm units through cooperatives and agribusiness enterprises. William S. Gaines, 202-967-4441.

Air & Water Purification & Pollution Control Equipment Exhibition. U.S. Trade Center, Milan. Nov. 6-12. Recent market research reveals that this is one of the Italian economy's fastest growing sectors. From a volume of $87.6 million in 1973, the Italian market is expected to jump to $386.8 million by 1978, an average yearly increase of 35 percent. This spectacular growth in demand for pollution control equipment caught Italian industry completely off-guard and it was not prepared to meet it. Consequently, imports in 1975 will be about $41 million and it is predicted they will jump to over $68 million in 1978, an average yearly growth of 19 percent. Sam Spaulding, 202-967-4508.

Microwave Components and Instrumentation Exhibition. U.S. Trade Center, Tokyo. Nov. 10-14. The Japanese microwave market is structured to accommodate imports based upon high technology, sophistication and quality. U.S. products which feature special surface processing, top quality raw materials and highly reliable precision made durable moving parts are much in demand in Japan. Their newly applied microwave technology is three to five years behind ours. Market information based upon microwave research recently prepared for this exhibition is available. Mara Yachnin, 202-967-5751.

Printing and Graphic Arts Exhibition. U.S. Trade Center, London. Nov. 10-14. Research has indicated strong U.K. markets for automated composition equipment, small offset and letterpress and multicolor printing and photographic equipment. U.S. sales in 1974 at $18.7 million were up 28 percent from 1972. Since 1970, this market's average annual growth rate has exceeded 20 percent. The British printing industries' shift to cold type and offset processes and increasing diet for multicolor printing, particularly for advertising, provide a strong market for U.S. advanced printing and graphic arts equipment. Benoit Brookens, 202-967-3355.

Industrial Process Controls and Instrumentation Equipment. Frankfurt Trade Center. Nov. 11-14. Unique sales opportunities exist in Germany for process measuring and control instruments and systems for measuring, recording and controlling physical and chemical properties, such as temperature, pressure, vacuum, fluid flow, liquid level, mechanical motion, humidity density, combustion and chemical analysis. Due to anticipated expansion of petroleum refineries and growth of the petrochemical industry, the German process control instrument market is expected to reach almost $750 million by 1978. Robert Wallace, 202-967-3748.

Process Control Instrumentation Technical Sales Seminar. Hong Kong, Taiwan, and Korea. Nov. 12-22. Market studies indicate rapidly expanding markets for American process control instruments for the iron and steel, chemical and petro-chemical, non-ferrous metals and electronics industries in these countries. The Technical Sales Seminars scheduled for Hong Kong, Taipei and Seoul will highlight American instrumental developments for test, regulation and process control systems. Seminar sessions will be supplemented by sales meetings between participating company representatives and key governmental and industry buying executives. Fred Crosley, 202-967-5285.

Educational Systems. U.S. Trade Center, Tehran, Nov. 16-20. Iran aspires to generate the same GNP as West Germany within ten years, using petrodollars as the industrial growth catalyst. The key ingredient to achieve this goal is a large pool of educated and trained Iranians. By 1978, 130 teacher training centers will be established, as will 500 technical and vocational training centers. Iran seeks the most modern methods to educate and train its people. This exhibition and accompanying seminar program will feature education technology systems, software, training aids and some hardware. Don Ryan, 202-967-4652.

Dental Equipment (JEEP). Paris Trade Center. Nov. 19-22. Recent research indicates French production cannot keep pace with demand for the latest dental equipment and supplies, as the number of new offices and modernization of existing facilities is increasing significantly. Especially in demand are modern dental chair units, professional equipment and apparatus, dental cements and fillings (acrylics), dental impression compounds, and porcelain artificial teeth. U.S. products have the highest reputation for quality and technical advancement in this field. Anita Brownstein, 202-967-5373.

First International Metalworking Fair. Sao Paulo. Nov. 20-30. The outlook for U.S. exports of metalworking and finishing equipment to Brazil is extremely good. The U.S. exported $52 million worth of metalworking equipment to Brazil in 1974, our largest market after Canada. In spite of expanding production capacity of domestic manufacturers, demand for imports of highly sophisticated metalworking equipment is expected to expand rapidly over coming years. In 1978 domestic production of metalworking equipment is expected to reach $83 million while imports are expected to go as high as $819 million. Sam Bevans, 202-967-4173.

Metal Finishing and Surface Treatment Equipment Exhibition. U.S. Trade Center, Milan. Dec. 2-5. Beset by rapidly rising production costs stemming from continuing high inflation and wage increases averaging 20 percent per year since 1969, Italian businessmen are stepping up purchases of equipment, supplies and techniques which will help to contain costs. The trend toward more widespread utilization of advanced, labor-saving equipment has had a strong impact on the Italian market for metal finishing and surface treatment equipment and supplies, which increased from $52 million in 1972 to $63 million in 1974. Earlier projections which called for imports of these items to increase to $66 million in 1976 must undoubtedly be revised upward in light of rapid and continuing recovery of the Italian economy, America's fifth largest overseas market. Pete Wilson, 202-967-2434.

Electronic Components. Paris Trade Fair. Dec. 8-12. The French electronic component industry is expected to expand at an annual rate of between 15 and 20 percent in the next several years. The value of imports is forecast to approach $155 million in 1977. U.S. manufacturers were the source of more than one-third of France's annual imports in recent years and can anticipate sales to France in excess of $50 million in 1977. Included in this exhibition are integrated circuits, transistors, capacitors, resistors, diodes and rectifiers and color TV picture tubes. Call Myra L. Triplett, 202-967-5381.

Sportswear and Casual Clothing—JEEP. U.S. Trade Center, Milan. Dec. 13-15. Sales opportunities for U.S. manufacturers of these types of clothing are soaring as the trend towards more informal dress and sportswear attire accelerates. Also, a shift in consumer purchasing of ready-to-wear clothing is evident. Over 70 percent of current clothing expenditures are for ready-to-wear apparel, a marked contrast from 20 percent in 1965. Clothing imports in 1973 represented over a $100 million market, an increase of 49 percent over 1972, and have been steadily rising. Future sales possibilities for American-made clothing are promising in light of the current competitive position of American merchandise. Ann Corro, 202-967-3945.

American Toy Fair. U.S. Trade Center, Tehran. Dec. 14-18. Iran is one of the fastest growing markets for American goods. Fueled by an influx of 20 billion petrodollars last year, per capita GNP doubled between 1972 and 1974. The rising level of affluence is reflected in drastically increased consumer demand. The Iranian market for toys has been artificially held back by high import duties and taxes, designed to protect local industry. Since pent-up demand for toys far surpasses the ability of Iranian industry to satisfy, the Iranian Government has eliminated the 100 percent import tax on toys. Don Ryan, 202-967-4652.

Printing and Graphic Arts Exhibition. U.S. Trade Center, Milan. Jan. 20-24, 1976. Offset printing presses, photographic and computerized composition equipment, color proofing systems, and automatic saddle stitchers adjustable to various size publications are among U.S. items of interest on the Italian market, which consists of 345 publishers, 8,700 general printers, 1,600 bookbinders and a sizable number of in-house printing facilities, many of which seek to modernize operations. Current exchange rates result in American equipment being very competitively priced. J. Michael Springmann, 202-967-4975.

Selfridges' In-Store Promotion. London. May 3-June 12, 1976. Selfridges, Ltd. of London is planning a special "American Bicentennial Promotion" featuring U.S. consumer goods for six weeks in spring of 1976. This promotion will spotlight a wide variety of American-made products. Special attractions will include an exhibit tracing U.S. history from covered wagon days to the space age. Charles E Johnson, 202-967-4705.

Licensing, Investment Abroad

Licensing and investment proposals from foreign firms are listed in these columns. Specific product interests in each proposal are highlighted in bold type to facilitate identification and each proposal is preceded by the appropriate four-digit product number taken from the Standard Industrial Classification (SIC) Manual.

Background information on opportunities abroad and assistance on overseas investments are available from the Foreign Investment Services Staff, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. "P" numbers should be used when responding to any of the specific proposals listed.

WTDR indicates that a World Traders Data Report containing financial and background information on the foreign firm is available for $15 from the Export Information Division, Room 1313, U.S. Department of Commerce, Washington, D.C. 20230, or from any Commerce District Office.

OPIC indicates that the country involved is eligible for investment insurance coverage and financing from the Overseas Private Investment Corporation. Information regarding applicable coverage may be obtained from OPIC, Washington, D.C. 20527.

2032—SOUTH AFRICA—Firm seeks contacts with manufacturers of **natural** and **health foods.** Licensing and franchising arrangements are of interest. Would also consider direct importing. Official of company plans to visit New York area in September. Visits to other areas could be arranged. Additional information available from B. W. Denison, Marketing Manager, Food Power Products (Pty) Ltd., P.O. Box 56087, Pinegowrie, Randburg. P-75364.

2591—CANADA—Owner of small **window shade company** seeks modest equity investment from American firm. Affiliation is sought to benefit from U.S. partner's purchasing power. In addition to window shades, firm produces draperies, curtains and bedspreads. Manny Bloom, Secretary/Treasurer, Bonavista Fabrics Ltd., 7230 Alexandra St., Montreal, P.Q. P-75365.

2816, 2865—GERMANY—Seeks licenses to manufacture **dry pigment preparations** to expand product line. Firm currently produces pigment pastes and additives for the plastics processing industries, especially for the (1) synthetic leather industry using PVC and polyester urethane as raw materials; (2) processors of polyester and epoxies; (3) manufacturers of polyester urethane foams; and (4) producers of electrical technology items. Firm prefers collaboration with medium-sized U.S. manufacturers who might be interested in cross distribution agreements. Mr. Hoehler or Mr. Rath, ISL Chemie GmbH, 5 Koeln 80, Von-Sparr Str. 33-35. WTDR. P-75384.

2821, 2865—MEXICO — Seeks to license technology in **solvents** and **resins.** Medium-size firm established in 1950, manufactures plasticizers and adhesives, is looking for new products. Will consider joint venture, but prefers to buy technology. Werner Rutishauser, Egon Meyer, S.A., Aptdo. Postal 699, Mexico 11, D.F. P-75357.

2834—GERMANY—Seeks licenses to manufacture wide range of **pharmaceutical products** including antacids, antidiarrheals, laxatives, bile therapy preparations, lipotropics, antispasmodics and anticholinergies, gentiourinary preparations, anticoagulants, hemastatics, digitalis **preparations, and** vasodilators. Established in 1919, firm has 1,200 employees and annual sales of $40 million; is manufacturer, distributor, exporter and importer of pharmaceutical specialities. Madaus, Dr. & Co., 198 Osterheimerstr., 5 Koeln-Merheim. WTDR. P-75385.

2865—ITALY—Seeks to license know-how and engineering to produce 10,000 metric tons of **coal tar enamel** annually. Established in 1904, firm operates 3 plants, employs 550 and has annual sales of $30 million. Carbochimica Italiana S.p.A., Viale Regina Margherita 5, 20122 Milan. WTDR. P-75361.

3079, 3499—INDIA—Seeks technical know-how to manufacture **plastic** and **metal embossing tapes of various widths and colors.** Also wants to buy **hand and electrically operated embossing tools and equipment** used in embossing operations. According to Indian firm, such tapes are not manufactured locally, and there is potential market in laboratories, hospitals, department stores, factories and schools in India. Because government's investment regulations generally preclude foreign participation in non-priority domestic industries, it may establish export requirements on this proposed venture. Indian firm is well established partnership acting as selling agent for reputable Tata Group of textile mills and enjoys, with its other associates, sales of about $16 million. R. R. Patel, Partner, Patel Ghanshyamdas & Co., Mulji Jetha Market, Dharmraj Gully, Bombay 400 002. WTDR. P-75373. OPIC.

3079—MEXICO — Seeks joint venture to **manufacture plastic hose.** Firm needs extruding and injection machines plus about $80,000 in capital. Established in 1959, company distributes plastic tubing for irrigation and installation of irrigation systems for fruit orchards. It has annual sales of $40.000. Alejandro Ramirez Gutierrez, General Manager, Halcon Industrial, S.A., Palma Norte 506, Mexico 1, D.F. Telephone: 518-68-20 or 521-59-70. P-75352.

3211—GERMANY—Seeks licensing arrangement for production of **insulating glass** in manufacture of doors and windows. Firm is wholesaler of building materials, woodworking equipment, tools and glass. Herbert Braams, Baubeschlag-Grosshandlung, Kampstrasse 4, 295 Leer. P-75370.

3312, 3316—PHILIPPINES — Established firm desires to enter into negotiations with U.S. steel producers or processors prepared to provide technical know-how, enter into licensing agreement or joint venture for manufacture of **special alloy steels.** Company manufactures steel ingots, reinforcing bars, wire rods, and nuts and bolts. Expansion plans provide for production of special alloy steels for spring steel for automobiles, high carbon steel with specification of astm 1045 to 1075 for forging auto spare parts and hand tools. Firm is planning for annual capacity of 15,000-16,000 metric tons to supply domestic market requirements. Company entitled to special tax benefits.. Alberto Dy, President, Allenco Steel Corp., 6th Floor, Architectural Centre Building, 136 Ayala Ave., Makati, Rizal. Cable: ALLENCO, Makati Philippines; telex, Allenco 7425256. P-75367. OPIC.

3431—KUWAIT—Seeks to establish sanitary ware factory in Eastern Province of Saudi Arabia which could supply whole range of **sanitary fixtures and equipment.** Firm wishes to build integreted fully computerized facility. Abdulla Alireza c/o Rezayat Trading Co., P.O. Box 106, Kuwait. Telephone, 433775; telex, Kuwait 2070; cable REZAYAT KUWAIT. P-75369.

3500—SWITZERLAND — Seeks licenses to produce **machinery for plastics and chemical industries.** Interests include special type plastics extruding machinery and related accessories for tubes, rods and sheets; automatic plastics casting machines, and mixers and grinders; plastic bottle blowing machines; and mixers, grinders and separators for the chemical industry. Founded in 1948, firm specializes in custom machinery in chemical and plastics field. Good reputation and financial standing. Mr. Oliver, President, Max G. Olivier & Co., P.O. Box 216, 8032 Zurich. P-75372.

3540—FRANCE—Manufacturer of sophisticated machine tools and packaging machinery used on automatic assembly lines seeks licenses. Firm wants to produce additional **assembly line equipment.** Company has number of major clients and reputation for quality work. Firm has no sales force, is interested in agreement with U.S. company that has marketing organization in France or elsewhere in Europe. Andre Bizard, President & General Manager, SOMINOR, B.P. 24, 14402 Bayeux. P-75374.

3540—SWITZERLAND — Seeks licenses to produce **medium technology machines and accessories.** Company manufactures machinery for metal engineering and wood fabrication and production of venetian blinds and partition walls. Employs 1,500, has outstanding contacts in building industry and extensive sales organization in Europe. Kurt R. Winzeler & Partners, Culmannstrasse 10, 8006 Zurich. Telephone: 01/32 92 51. P-75354.

3551—INDIA — Newly formed company seeks license to manufacture **paper machinery.** Proposal calls for production of paper machines of 50- to 200-ton capacity per day and machines for making specialty paper up to 50-ton capacity per day. Proposed plant would be established at Visakhapatnam, Andhra Pradesh. Necessary equipment would be imported. H. Bhatara, Resident Executive, West Coast Paper Mills, Ltd., 101 Sundar Nagar, New Delhi. P-75356. OPIC.

3559—MEXICO—Seeks joint venture to expand production of **high frequency machines for plastics heat sealing, preheater and induction heating generators.** Firm needs financing and technical assistance. Has purchased site for new plant, plans to open offices in several major cities. Also has distributor in Peru to cover Andean Pact market. Company presently accounts for 70 percent of domestic production. Hector M. Tellez, General Manager, Industrias Telfer, S.A., Manuel Dominguez 21, Piso 3, Mexico 1. D.F. P-75360.

3559—SWITZERLAND — Well established manufacturer of paper converting and other precision machines utilizing sophisticated electronic controls seeks license. Wants to produce additional **precision machinery.** Zurich-based company employs 400, has extensive experience and a worldwide sales network. Kurt R. Winzeler, Kurt R. Winzeler & Partners, Culmannstrasse 10, 8006 Zurich. Telephone: 01/32 92 51. P-75355.

3561—UNITED KINGDOM — Manufacturer of fiber pumps, marine propellers and multi drill heads wants to broaden its product line. Seeks license to produce **centrifugal pumps** for chemical and process industries. Would market in U.K. and Europe. Firm has expertise in hydraulics and aeronautical engineering, employs 550. Slack & Parr Ltd., Kegworth, Derby, DE7 2FL, England. P-75362.

3567—GERMANY—Manufacturer of **industrial furnaces** with particular application to wire industry seeks cross licensing agreement. German firm employs 50, markets in Germany and other EEC countries. Helmut Moehl, Manager, Moehl & Co. KG, 5 Koeln 80, Moehlstr. 24. Telex: 08873414. WTDR. P-75383.

3679—UNITED KINGDOM—Large manufacturer of components and equipment for **electronic and telecommunications** industry seeks licenses to make related products. Company specializes in wound wire components. Employs around 7,000, markets in Europe and Australia. J. J. Hayes, Marketing and Sales Manager, Parmeko Ltd., Percy Road, Leicester, LE2, 8FT, England. Telephone, 0533-832287; cable, PARMEKO LEICESTER. P-75358.

3700—SWITZERLAND—Medium-sized firm specializing in all kinds of sheet metal work and processing of aluminum extrusions seeks licenses. Company is interested in production of **medium technology products and transportation equipment.** Operates modern manufacturing facilities and maintains sales force in Europe and Switzerland. Kurt B. Winzeler, Kurt R. Winzeler & Partners, Culmannstrasse 10, 8006 Zurich. Telephone: 01/32 92 51. P-75353.

3822, 3823—SWITZERLAND — Manufacturer and R & D engineering firm is interested in distributing U.S. industrial **process controls, temperature measuring instruments and monitoring systems, automated industrial process systems;** manufacturing such instruments under license in Switzerland and finding a U.S. agent or manufacturing licensee for its temperature controls and industrial process instruments in U.S. Firm specializes in construction of industrial process controls, temperature regulating and measuring instruments and automated test and production systems for laboratory and industrial use. Also concentrates on R & D and software for automated industrial and regulating processes. For additional details, write: Foreign Investment Services Staff, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. P-75375.

3825—UNITED KINGDOM—Seeks license to make **automatic test equipment.** Firm designs and manufactures special digital systems, imperial to metric converters and printers. Employs about 35. J. C. Field, Managing Director, Grenway Electronics Ltd., Factory No. 20, Station Approach, Fleet, Aldershot, Hampshire GU13 8QY, England. P-75359.

3944, 3524, 3537—TURKEY—Newly established firm interested in collaborating with U.S. concerns ready to enter into equity participation up to 49 percent, provide technical know-how and assist in procurement of production machinery to manufacture/assemble **tricycles, garden tractors with maximum 15 hp. rating and container-trailers.** Sizable increase in production units expected within next five-year period. Stockholders of firm also won Ciftcilar Ticaret Ve Sanayi T.A.S., well-known Istanbul firm which represents several large automobile companies. Otometal Otomotiv Ve Metal Sanayi A.S. at Zincirlikuyu Meydani, Buyukdere Cad., 121 B. Blok Daire 32 Istanbul. P-75368. OPIC.

6552—MEXICO — Real estate development firm has tract of land next to coastal city of Manzanillo it wishes to develop into condominium area. Total land area is 400,000 sq. meters (about 91 acres) with two beaches on ocean side and with land side facing large lagoon; still undeveloped, though water and electric power apparently available. Developers wish to install necessary infrastructure and sell subdivided properties. Asking price for undeveloped land is US $2 per sq. m. Not all property is available for construction due to configuration. Interested persons should be familiar with Mexican legislation regarding foreign investment in coastal areas. Arturo Sanchez Diaz, President of Administrative Council, Fraccionadora Ventanas al Pacifico S.A., Madero 112, Aptdo. Postal 39, Manzanillo, Colima. P-75363.

Licensing In U.S.

For additional information on these opportunities to manufacture foreign firms' products in the United States under a licensing agreement or in partnership, write the Investment Services Staff, Bureau of International Commerce, Room 4020, U.S. Department of Commerce, Washington, D.C. 20230 (202-967-2248), referring to the appropriate file number.

AUSTRIA—Company is seeking U.S. licensee to manufacture its **agricultural foam** said to be perfect substratum for plant cultivation in horticultural operations and hobby gardening. File 2759

ENGLAND—Company wants to contact U.S. company to produce its **aluminum architectural system** under license in U.S. System is based on simple connector enabling construction of internal partitioning, doors, windows, show cases and furniture. U.S. firm should have good distribution system in architectural aluminum products and display and store fittings. File 2760

ENGLAND—Company wants U.S. licensee to produce its **non-slip finish** which when applied to trays enables tipping of tray to 85 degrees without articles on trays slipping. File 2761

ENGLAND — Company is interested in locating U.S. licensee to produce its **fine-blanking presses** in U.S. These are all hydraulic machines ranging from 75- to 650-ton capacity. File 2762

FRANCE—Inventor is seeking U.S. license for production of **patented plumbing system** consisting of breech pipe designed for realization of single drainage without secondary ventilation. File 2763

GERMANY — Company is seeking U.S. manufacturer to produce its newly developed type of **metal furniture,** especially useful in offices and school rooms for adults. Advantages of system are ease of installation and dismantling, and variety of different units that can be created. File 2764

SWITZERLAND—Company is seeking U.S. licensee for its **precision parts, tools and instruments** for watch industry. File 2765

SWITZERLAND — Electrical engineer is seeking U.S. firm to manufacture his special patented kilns for use in several industries. File 2766

Brochure Details Benefits Of Investing In Lucerne

U.S. firms interested in investment in Switzerland may wish to review a new brochure entitled "Lucerne." Prepared by the Commission for Economic Promotions of the City of Lucerne, the publication describes Lucerne's investment climate, advantageous location at the center of European markets and favorable tax conditions. The Commission provides a wide range of economic services to existing and prospective industries. Contact: Dr. A. Gugler, President, Commission for Economic Promotions of the City of Lucerne, CH-6002 Luzern Hirschengraben 17, Buro 103, Postfach 576, Switzerland. Telephone: 041/218283. P-75371.

Papua New Guinea Sets Investment Priorities

The Government of Papua New Guinea recently has announced its first national investment priorities schedule which lists particular industries open to foreign investment. The schedule also sets guidelines and conditions under which foreign investors can operate, and specifies those activities reserved for Papula New Guinea (PNG) investment. The government welcomes foreign investment in the following areas: manufacturing, fishing, forestry development, exploration and extraction of minerals and hydrocarbons, large scale construction and certain professional services.

Potential foreign investors should be prepared to follow certain definite guidelines. These include an agreement to comply with all laws of PNG, permit government or local participation in projects where practical and appropriate, train Papua New Guineans for all levels of employment, utilize supplies and services available within the PNG, operate within approved environmental guidelines and provide capital requirements from outside PNG to the maximum extent possible. Additional conditions may also be imposed by the government as a condition for registration with the National Investment and Development Authority.

Those activities reserved for Papua New Guineans include small manufacturing, plantation agriculture, processing of cocoa, copra and sago, bus transportation and certain small scale operations. Even in these areas, provisions are made for new foreign investment where local businessmen are unwilling or unable to invest. For further information, write: Tom Allen, Executive Secretary, National Investment and Development Authority, P.O. Box 5053, Boroko, Papua New Guinea.

Kibbutz Industries Group In Israel Seeks Agreements

The Kibbutz Industries Association, Ltd., Israel, seeks to collaborate with U.S. firms in joint venture or licensing agreements to develop 80 or more new industrial projects. The association plans to build at least 20 plants during 1975 at an estimated cost of $60 million.

The organization currently operates 261 factories with an annual turnover of $265 million and employing 10,000 people. It also wishes to acquire licenses to manufacture new products in the existing plants.

The Kibbutz Industries are most active in the following sectors ranked in decreasing volume of yearly sales: metals, plastics and rubber, wood and furniture, food, electrical and electronic, quarrying and building materials, optics and miscellaneous, chemical and pharmaceutical, textile and leather, and handcrafts.

Projects most preferred are those requiring highly motivated workers, employing a high proportion of engineers and technicians, using advanced technology and sophisticated machinery, and having export potential. Most Kibbutzim are in development areas and are thus qualified for grants and long term, low interest loans.

For further information, contact Joe Criden, Director, Kibbutz Industries Association, Ltd., 8 Shderot Shaul Hamelekh, Tel Aviv. P-75366. OPIC insurance is available.

Foreign Trade Inquiries

These trade opportunities are based on reports received from the U.S. Foreign Service—Department of State by the Trade Opportunities Division, Room 2323, U.S. Department of Commerce, Washington, D.C. 20230. The commodities in which foreign firms have interest are indicated by the five-digit numbers and commodity classifications which are from the Standard Industrial Classification (SIC) Manual and the Numerical List of Manufactured Products, 1972 Census of Manufactures.

U.S. firms should be aware that the listing in Commerce Today *of opportunities to trade in specific commodities and technical data does not necessarily imply approval of their export by the Department of Commerce pursuant to the Export Administration Act of 1969. Applicable export licensing regulations must be followed.*

Every effort is made to include only traders with good reputations. However, the Department cannot be responsible for any trade relations.

WTDR indicates that a World Traders Data Report on this specific firm is available at $15 from the Export Information Division, Room 1313, U.S. Department of Commerce, Washington, D.C. 20230. A WTDR is a trade profile which contains commercial information including financial references, on an individual foreign firm. Orders must include complete name and address of the subject firm and be accompanied by payment. Further information concerning WTDRs and request forms are available at each Commerce District Office.

The mark (•) indicates that this trade opportunity is a request for bids by a foreign government agency.

Direct Sales

Gathering of forest products

0849XXX—MEXICO — Company manufactures native furniture, needs rattan rods of following thicknesses: 1-½ inch, 1-¼ inch and 1 inch. Make rattan and wicker furniture and objects. Company small, employing four weavers. Total sales vary due to unavailability of raw materials. Purchases will be approximately $5,000 each six months. Request samples, price lists and approximate shipping time. Correspondence preferably in Spanish, though English understood. Reply to: Marcas Garcia Saucedo, Owner, Taller de Artesania, Calle 12 de Diciembre Num. 17, Colonia Escandon, Mexico 18, D.F. Tel: 528-91-15.

Anthracite

• 1111XXX—IRAQ—Supply of 1,400 tons anthracite coal. Tender No. 4/1975. Bid deadline June 30. Tender documents available from State Battery Manufacturing Co., P.O. Box 190, Waziriyah, Baghdad.

Dimension stone

1411XXX—KOREA—Quartz, each piece ½ pound or more. Annual requirement—30 metric tons with immediate order to be issued for 10 metric tons, for use in making rings, earrings, necklaces, other ornaments. Firm is gem cutter and exporter of above products and importer of quartz. Firm exports $15,000 monthly of its product to Europe. Reply to—Whong, Young-Kue, Korea Jewelry Trading Corp., Seoul. Cable: Jewellers Seoul; tel: 22-0957 or 23-5876.

Building construction

• 15100—LIBYA—Main tender committee at University of Tripoli invites specialized contractors to bid for construction of facilities for Faculty of Petroleum Engineering & Mining. Project involves: four- or five-story concrete building for classrooms, laboratories, staff offices and research center; main building, which will consist of general administration office, library, museum, and lecture halls; roads, water, sewage, and electric networks, and car parking facilities; and a metal compound for machinery, equipment, training tools, and work shop. Construction area will be approximately 60,000 sq. meters. Tender documents and specifications obtainable for LD 250 (US$865). Tender documents must be accompanied by a guarantee of LD 10,000 (US$34,000). Interested firms write: Tender Committee, Tripoli University, P.O. Box 398, Tripoli, expressing interest, explaining qualifications, experience, and financial status, and work executed and under construction. Bid deadline July 3.

Heavy construction

• 16200 — KOREA — Office of Supply (OSROK) is inviting tenders from qualified companies for design, manufacture, supply, delivery and erection of coal handling installation for port facilities at Busan Port under OSROK Invitation No. IBRD/L-75049-P11. Only tenders for complete design and installation will be considered and tenderers will be required to submit qualifications' data with request for tender documents which will indicate competence in design, manufacture, and erection of similar facilities. Financed jointly by Korean Government and IBRD. Project will be let on unit price lump sum basis and will consist of following equipment and facilities: 2 gantry type ship unloaders, each with cap. 300 tons per hr; Transfer conveyor 600 tons per hr along quay approx. 130 meters long, including supports; Collector conveyor between 2 coal stacking areas 600 tons per hr, routed via the tripper of stacker/reclaimer, approx. 260 meters long, and elevating at end to set of truckloading hoppers and associated equipment for complete installation, including supports and conveyor bridge; Stacker/reclaimer with stacking cap. 600 tons per hr and reclaim cap. of 400 tons per hr; Set of 6 truckloading steel hoppers, each with cap. $50M^3$, with distributing equipment; Complete electrical and control equipment and connections for above installation. Pre-tender meeting: July 23 at Busan Port Authority (BPA), 46-63, 3rd St., Daechang Dong, Dong-ku, Busan. Tender documents including design criteria and specifications can be obtained at above authority after June 23. Tender Submission: Sept. 26 at Office of Supply, Seoul. Any questions which may arise concerning documents should be directed to Office of Consultant, Lyon Associates, Inc., P.O. Box 559, Gwang Wha Moon, Seoul 110.

Textile goods

2296035—HONG KONG—Dipped heat treated polyamide nylon type cords, assorted sizes & lengths. Small sole proprietorship organized in 1970 dealing in gen. trading. WTDR in prep. End-user is S.E. Asian govt. & firm desires to tender for supply contract. Reply to—T. S. Wong, Proprietor, Hong Kong World-Wide Ent. Co., 113 Tung Ying Building, 100 Nathan Rd., Kowloon, Hong Kong. Cable: Worldtrade Hong Kong; tel: 3-678856.

Drugs

2833213—GREECE—Botanical chemicals in bulk. Immediate order for following specific chemicals for local production of insecticides, fungicides & herbicides (all quantities per yr.)—mineral oils for production of ag. mayonnaise 1500 tons; azinphos-ethyl technical 100-200 tons; azinphos-methyl technical 100-200 tons; diazinon technical 500 tons; endosulphan technical 1,000 tons; carbaryl tech. 2,000 tons; kelevan tech.1,000 tons; lindane tech. 100-200 tons; client prepared to pay $7,000-8,000/ton. Dicofol tech. 100 tons; malathion tech. 200 tons; fenitrothion tech. 300-500 tons; dimethoate tech. 200 tons; methyl parathion tech. 300 tons; ziram tech. 200 tons; captan tech. 500-1,000 tons; diodine tech. 200 tons; folpet tech. 200-300 tons; atrazine tech. 500-1,000 tons; ametryne tech. 100 tons; simazine tech. 100-150 tons; diuron tech 50-100 tons; M.C.P.A. tech. 500 tons; mecroprop (MCPP) tech. 100-200 tons; prometryne tech. 100-200 tons; trifluralin tech. 200-300 tons; propanil tech. 500-1,000 tons. Largest local importer of ag. chemicals for production full range insecticides, fungicides & herbicides. Reports 1974 turnover $10.5 million and exports to 30 countries of E. Europe, Mid-East & Africa. All purchases by irrevocable L/C. No credit necessary. Requests prices and packing/delivery times for all items. Particularly interested in additional new materials for preparation of herbicides, fungicides, and insecticides under contract with technology for formulation. Also interested in formulas for treatment of "wild oat." If product and price satisfactory, est. regional mkt. of 2,000-3,000 tons annually. Would additionally be receptive to proposals for joint venture with estab. U.S. firms for local production ag. chemicals or vet, pharmaceuticals. WTDR 3/75. Reply to— Mr. Geo. Servos, Pres., Diana—George Servos & Co., 7 Agiou Mina St., Thessaloniki, Cable Diana Thessaloniki; telex 41526 Dian Gr; tel 031-531241/531242.

Agricultural chemicals

• 28700—NEW DELHI—Liquid anhydrous ammonia (minus 33 degree C). Public sector Fertilizer Corp. of India Ltd. plans to import 310,000 metric tons between 1977 and 1980 according to following schedule: 1977—30.000 metric tons; 1978—80 000 metric tons; 1979—100.000 metric tons; 1980—100.000 metric tons. Tender number CDN/ENG/8. Bid deadline not specified. This is exploratory inquiry. P. Guha Thakurta, Chief Public Relations Mng., F.C.I., F-43 N.D.S.E. Part I, Ring Rd., New Delhi 110049. Tender documents will be issued after obtaining preliminary response of potential suppliers.

Steel mill products

• 33100—INDIA—6,000 meters high test line pipe 1066.8 MM (42") outer diameter, 14.27 MM (0.562") wall thickness conforming to specification API 5LK. Tender No. 1230, no bid deadline but quotations requested on immediate basis. Engineers India Ltd., (EIL), Hindustan Times House, Kasturba Gandhi Marg, New Delhi, 110001. Specifications available from Iron and Steel Program, BDC, U.S. Department of Commerce, Washington, D.C. 20230. 202-967-2438.

• **33100—IRAQ** — Supply of carbon steel plates for use in LPG storage tanks. Tender No. 6/75; bid deadline June 10. Director General, Oil Refineries Administration, Ministry of Oils and Minerals, Baghdad. Tender documents available from Iron and Steel Program, BDC, U.S. Department of Commerce, Washington, D.C. 20230. 202-967-2438.

• **33100—TANZANIA**—35 kilometers pressure pipe lines of various diameters, fittings and ancillaries. Bid deadline extended to June 20. Tender documents available at $14 per set from G. J. Schimmel, Planning and Development Manager, Kilombero Sugar Co. Ltd., P.O. Box 1988, Dar es Salaam.

• **33100—INDIA**—Supply of prime quality cold rolled tin mill black plates in coils, type "MR", bright finish, temper T3 or T4, suitable for manufacturing electrolytic tin plates. Tender No. 23 of 1975; bid deadline June 9. Sail International Ltd., Hindustan Times House, 18-20 Kasturba Gandhi Mar, New Delhi 110001. Tender documents available from Iron and Steel Program, BDC, U.S. Department of Commerce, Washington, D.C. 20230, 202-967-2438.

Nonferrous rolling & drawing

• **33500—COLOMBIA** — Design, manufacture and supply of equipment and materials to construct 110 KV transmission line. Tender No. C-030; bid deadline June 30. Corhyracion Electrica de la Costa Atlantica (CORELCA), Calle 44 No. 44-39 Piso 2, Barranquilla. Specifications available at above address for 2,000 pesos ($65).

Fabricated wire products

• **34810—BOLIVIA**—Telefonos Automaticos La Paz S.A., Edificio Gran Centro, 2 Degree Piso, Avenida Mariscal, Santa Cruz, La Paz, is requesting bids for supply of 350,000 meters of telephone wire with two copper conductors and one iron carrier. Bid deadline June 17. Copies of tender announcement and specifications available from above address or on short-term loan basis to firms located in U.S. from Science and Electronics Division, BDC-466, Room 1001, U.S. Dept. of Commerce, Washington, D.C. 20230, 202-967-5569.

Construction, mining, materials handling machinery, equipment

• **35300 — TURKEY** — Istanbul Belediye Baskanligi (Municipality of Istanbul), Makina Elektrik Ve Sanayi Isleri Mudurlugu, Istanbul, requests bids on following equipment: One street sweeper rotary brushes, vacuum suction pick-up. Water spray facility. Min. 1.2 cu. m. littler pick-up tank with dumper. Min. 30 HP diesel engine. Three concrete mixers: Min. 16 HP gasoline engine. Min. 500 Lt. capacity drum. Min. 15 cu. M/H capacity. Three mobile concrete mixers: for installation on trucks to be furnished by buyer: 3.5-4.5 cu. M/H drum. Approx. 300 lt. capacity water tank. Two air compressors: Min. 65 HP diesel engine. Min. 7.5 cu. M/H, 7 KG/CM2. Portable type, with two rubber-tired carriage with two bar, with cowling. Three hydraulic pressure test pumps: for hydraulic pressure testing of compressed gas bottles, at 10 to 50-75 KG/CM2 and 50 to 300 KG/CM2 hydraulic pressure. Option: To be specified in tenders. Delivery period: To be quoted in tenders. Prices: In terms of f.o.b. or c.i.f. Istanbul. Payment: L/C. Bidding specifications may be obtained in English from Modern Translation Bureau, Karanfil Sokak 49/2, Yenisehir, Ankara, for $6 for each item. Checks must accompany order. Bid deadline July 14.

Metalworking machinery

• **35450—AFGHANISTAN**—Telephone and Telegraph Dept., Ministry of Communications, Kabul, has issued Tender No. 288 for 30 units 2-KG and 20 units 50-KG scales. Bid deadline June 15.

Special industrial machinery

3551XXX—AUSTRALIA—South Australian Govt. Hospitals Department is planning construction of U.S. $10 million central frozen food factory for supply of precooked frozen food to govt. hospitals and institutions. Initial capacity of facility will be 25,000 frozen meals per 8-hour shift expanding to 50,000 meals over period of 10 years. Hospitals Dept. requests general information from interested suppliers and/or professional organizations on: receiving and storage of food raw materials; preparation and cooking of food products; portioning, packaging, freezing and labeling of products; storage, under deep frozen conditions, of products; and assembling of orders for dispatch to consumer centers. Detailed data is requested in following specific areas: 1. vegetable preparation: equipment for peeling, steam blanching, dicing and cutting at rate of 1000 kg per hour; 2. meat preparation: meat will be purchased pre-cut in portion-controlled sizes but will require equipment for mincing, making meatballs and patties, cubing and extrusion of sausage meat, mixing, portioning, battering and breading, dicing and tenderizing, capacity of equipment to be approximately 750 kg per hour; 3. bakery: makers, dough-brakes, oil-fired travelling ovens; 4. general cooking area: continuous and automatic cooking equipment to feed production lines. Equipment will be required for boiling and stewing, steaming, roasting and baking, frying and grilling, all with production capacity of 1000 kg/hour; 5. production area: equipment for automatic portioning of large range of different vegetables, meats, desserts into multiportion pack containers. Lane controllers and sophisticated conveyor systems will be required for four automatic production lines working at rate of 750 kg/hour representing approximately 7,000 food portions per hour; 6. product storage: temperature of -30 degree centigrade; area requires simple but efficient storage system capable of holding 400,000 frozen meals representing various quantities of some 400 products. System should ensure a "first produced, first used" situation; 7. the food pack: envisaged that major part of food produced will be contained in multiportion pack suitable for all aspects of a frozen food system. Each pack will contain 10-15 portions of a single food item. A pack system will be required for factory comprising equipment for making pack, sealing with a lid after freezing and labelling pack for distribution. Approximately 10.000 packs will be required per eight-hour shift. Interested equipment suppliers, machinery manufacturers and professional organizations requested to contact directly: M. R. Baker, Senior Administrative Officer, Hospitals Department. Box 114, Rundle St., Post Office, Adelaide, South Australia 5000. Telephone: (08) 228 0911, Ext. 395. Quote reference: MRB:LE May 2.

• **35590 — MOROCCO** — Ministere Des Postes, Des Telegraphes Et Des Telephones, Centre De Tri Postal, Place Bandoeng, Casablanca has issued tender No. Concours International for operational machinery for handling of postal sacks, unsorted packages and related postal items. Bid deadline June 10. Companies wishing to participate should contact above address by registered air mail. Request should include technical and commercial information and recent financial statement.

General industrial machinery

• **35610—ECUADOR**—Supply of two each slush pumps, for mud digging and sewer cleaning in municipal sewer system. Also four each high pressure hydraulic motor vehicle cleaners. Bid deadline July 1. Specifications available for $20 from Empresa Municipal de Alcantarillado de Guayaquil, 10 de Agosto 112, Guayaquil. Ref.: Tender 01-75, IDB Loan 271-SF-3. Payment by L/C or S/D at seller's option. Purchasing financed with IDB assistance to municipal sewer construction agency.

• **35610—SUDAN**—Six diesel driven pumping units for irrigation of Malakal rice scheme on White Nile River. Bid deadline July 30. Specs available for $30 each from Director Development, Ministry of Irrigation and Hydroelectric Power, Wad Medani. Of six units to be delivered, four should work in parallel. Minimum discharge per unit is 1.00 M3/sec at maximum static head of 9 meter. Pumping time 24 hours daily. Supplier should quote c.i.f. or f.o.b. Port Sudan in Sudanese currency, will be responsible for installation, spare parts, along with one set of stoplob together with gantry crane. Pumping station should be in operation by April 30, 1977. Security equal to 2 percent of tender value to be deposited with tender in form of bond, certified check, or bank draft.

Office, computing, accounting machines

• **35730—INDIA**—Bhabha Atomic Research Centre, Purchase Division, III Floor, Mohatta Bldg., Palton Rd., Bombay 400 001, has issued Tender No. PDN/BARC/MIA/7243 for one 16-bit computer with peripherals, bid deadline June 30. Also, Tender No. DPS/AMD/MIA/259 for 20 photomultipliers and spare tubes, bid deadline June 24. Copies of tender announcements and specifications available on short-term loan basis to firms located in U.S. from Science and Electronics Div., BDC-466, Room 1001, U.S. Dept. of Commerce, Washington, D.C. 20230. 202-967-5569.

• **35730 — BOLIVIA** — Telefonos Automaticos La Paz, S.A., Edificio Gran Centro—2" Piso, Avenida Mariscal Santa Cruz, La Paz, is seeking general purpose computer to perform various functions such as counting daily telephone traffic, inventory control, and accounting system. Interested firms should discuss technical requirements in person. Bid deadline June 17. Copy of specifications available on short-term loan basis to firms located in U.S. from Science and Electronics Div., BDC-466, Room 1001, U.S. Dept. of Commerce. Washington, D.C. 20230, 202-967-5569.

• **35730—INDIA**—Bhabha Atomic Research Centre, Purchase Division, III Floor, Mohatta Bldg., Palton Road, Bombay 400 001, has issued tender No. DPS/BARC/MIA/7244 for one 12-bit computer and peripherals. Bid deadline June 30. Copies of tender announcement and specifications available on short-term loan basis to firms located in U.S. from Science and Electronics Division, BDC-

466, Room 1001, U.S. Department of Commerce, Washington, D.C. 20230, 202-967-5569.

Electric transmission, distribution equipment

• **36110—INDIA**—Bhabha Atomic Research Centre, Purchase Division, III Floor, Mohatta Bldg., Palton Rd., Bombay 400 001, has issued the following tenders: No. DIE/BARC/MIA/7242 for one 1024 multichannel analyzer, bid deadline June 25; No. DPS/BARC/MIA/7241 for one multichannel analyzer, deadline June 25; No. PDN/DPS/RRC/MIA/257 for testing instrument, 500 KG capacity, for tension, compression and flexure testing in controlled environment, deadline June 17; No. PDN/HWP/MIA/266 for double-beam specific spectrophotometer with accessories, deadline June 11. Copies of tender announcements and specifications available on short-term loan basis to firms located in U.S. from Science and Electronics Div., BDC-466, Room 1001, U.S. Dept. of Commerce, Washington, D.C. 20230. 202-967-5569.

• **36110—BAHRAIN** — Electricity Directorate, P.O. Box 2, Manama, is seeking various types of meters, such as 2,000 house service kilowatt hour 20 amp meters suitable for 230 volt 50 cycle operation and 1,000 10 amp meters. Bid deadline July 10. Additional details may be obtained on short-term loan basis to firms located in U.S. from Science and Electronics Division, BDC-466, Room 1001, U.S. Department of Commerce, Washington, D.C. 20230, 202-967-5569.

• **36110 — BOLIVIA** — Comite De Obras Publicas De Santa Cruz, Casilla 218, Santa Cruz, is seeking 5,000 domestic water meters. Interested firms must be represented in Bolivia. Bid deadline June 17. Copy of specifications available on short-term loan basis to firms located in U.S. from Science and Electronics Div., BDC-466, Room 1001, U.S. Dept. of Commerce, Washington, D.C. 20230, 202-967-5569.

Electric lighting, wiring equipment

• **36430—COLOMBIA**—Empresa de Energia Electrica de Bogota, Calle 13 No. 37-35 of 216, Bogota, has issued tender No. Licitacion Publica Internacional PAP-75-13 (IDB-7) for 6,850 photoelectric controls and 5,700 magnetic contacts for city's public lighting system. Bid deadline July 8. Copy of specifications available from above address for $64.

Communications equipment

• **36610—INDIA**—Director General, Posts and Telegraphs, Parliament St., New Delhi 110 001, has issued Tender No. 10-20/73-MMD for cash register machines for telephone revenue accounting units, bid deadline July 24. Also, Tender No. 12-121/75-MMD for 13 GHz digital relay equipment, bid deadline July 8. Copies of tender announcement and specifications available from above address for $2.74 each.

• **36620 — IRELAND** — Building Unit, Department of Education, Marlborough Street, Dublin 1, is seeking educational equipment such as electronic laboratory equipment, computers, and radio & TV equipment. Bid deadline June 23. Copy of specifications available from above address for about $70.

Instruments for measurement, analysis and control

• **38210—INDIA** — Bhabha Atomic Research Centre, Purchase Division, III Floor, Mohatta Bldg., Palton Rd., Bombay 400 001, has issued Tender No. PDN/HWP/MIA/264 for one infrared spectrophotometer with double beam optical null arrangement and accessories, bid deadline June 11. Also, Tender No. PDN/DPS:RRC:MIA:248 for chemical analyzing systems with built-in spectrum stripping facility and teletype output device, bid deadline June 9. Copies of tender announcements and specifications available on short-term loan basis to firms located in U.S. from Science and Electronics Div., BDC-466, Room 1001, U.S. Dept. of Commerce, Washington, D.C. 20230. 202-967-5569.

Optical instruments, lenses

• **38310—INDIA**—The Bhabha Atomic Research Centre, Purchase Division, III Floor, Mohatta Bldg., Palton Rd., Bombay 400 001, India, has issued following tenders: No. DPS/HWP/MIA/276 for one infrared spectrophotometer for isotopic analyses of deuterium in heavy water, ammonia and trace gas analyses, with accessories and spares, bid deadline June 20; No. PDN/BARC/MIA/7189 for single or double focusing mass spectrometer for analyzing gases, liquids and organic solids, deadline June 24; No. DPS/RRC/MIA/249 for one 3.4 M convertible stigmatic ebert spectograph with slit, grating, grating holder and other accessories, deadline June 9. Copies of tender announcements and specifications available on short-term loan basis to firms located in U.S. from Science and Electronics Division, BDC-466, Room 1001, U.S. Dept. of Commerce, Washington, D.C. 20230. 202-967-5569.

Schools, educational services

• **82990—JAMAICA** — Ministry of Education, 2 National Heroes Circle, P.O. Box 498, Kingston, is seeking bids for supply and installation of language laboratory units for 17 schools. Bid deadline July 28. Copies of tender announcement and specifications available from above address.

Representations

Foreign private firms are interested in agency agreements and/or distributorships for these products.

Abrasive, asbestos, nonmetallic mineral products

3299055—HONG KONG—Mica, high grade 100 tons minimum/shipment. Continuous quantities required. U.S.-owned trading firm. WTDR in prep. Cable, telex—Alvin Florea, Mng. Dir., Floline Trading Co., Ltd., 4th Fl., On House, 13 Wyndham St., Hong Kong. Cable Flotrade Hong Kong; telex 73054 Alflo HX.

Steel mill products

3313XXX—INDIA—Ferroalloys in powder form: low carbon manganese powder—manganese 85-90%; carbon 0.05 max.; silicon 0.01% max.; sulphur 0.01% max. phosphorus 0.03% max.; iron balance. Low carbon ferro chrome (chromium) powder: chromium 70-75%; carbon 0.25% max.; sulphur 0.01% max.; silicon 0.05% max.; phosphorus 0.03% max.; nitrogen balance. Ferromolybdenum powder—molybdenum 65-75%; carbon 0.03% max.; silicon 1.5% max.; sulphur 0.5% max.; phosphorus 0.05% max.; copper 0.50% max. Ferrovanadium powder: vanadium 50-55%; silicon 1.25% max.; carbon 1.10% max.; sulphur 0.05% max.; phosphorous 0.50% max.; aluminum 1.50% max. Ferrocolumbiun (nobium) powder: niobium 60-70%; carbon 0.1% max.; silicon 3.0% max.; sulphur 0.05% max.; titanium 0.05% max.; manganese 2.0% max.; aluminum 2.0% max.; phosphorus 0.05% max.; tantalum 6.0% max.; iron balance. Mesh sizes: 44 100%; 240 50% min.; —350 70% min. Packaging: material should first be packed in polythylene bags then be repacked in seaworthy new steel drums weighing 250 kilograms net. AUA is prominent importer/sales indenting agent for stainless steel, nonferrous metals and high carbon steel products. Annual sales turnover exceeds $10 million. Reply to—I. E. Soomar, Mgr., Amalgamated Universal Agencies Pvt. Ltd. (AUA), F 8/1 Vasant Vihar, New Delhi 110057. Cable Detamag; tel 672732; telex 031-3864.

Metalworking machinery

3546XXX—35531XX—ICELAND — Power driven hand-tools. 220 volts, 50 cycles. Woodworking machinery for home workshops. Quote f.o.b. Norfolk. Importers/wholesalers in various machinery & equip. for electrical industry selling nationwide to contractors, power stations, etc. Reply to—Gisli O. Olafs, Mgr., Iselco S/F Iceland Electric, P.O. Box 7074, Armula 32, Reykjavik. Cable Islcomp; telex 2203 Iselco Is; tel 86466. Excl. agency.

UNDP Aid Requested

Six developing countries and regions have submitted 9 preliminary requests for financial and technological assistance from the United Nations Development Program (UNDP). These requests have not been funded nor have executing agencies been designated to implement them. They are made available to U.S. firms as potential projects on which future bid proposals may be requested, or as indications of the industrial and social plans of the requesting countries. U.S. firms are cautioned that these projects may not be approved for technical and/or other reasons.

Interested U.S. firms may obtain individual summaries of these projects from the Export Information Reference Room, Office of Export Development, Rm. 1063, Attn. Betty W. Patrick, U.S. Department of Commerce, Washington, D.C. 20230. Please include a pre-addressed label with your request, and identify each project summary desired by project number, country, and title. If the booklet, *UNDP Guide to Firms and Organizations*, would be useful, please so indicate.

BRA/74/010 — BRAZIL — Telecommunications—human resources.

INS/74/018 — INDONESIA — Textile industry development program.

INS/74/032 — INDONESIA — Assistance to the metals industries through the Metals Industries Development Center, Bandung.

SUD/74/005—SUDAN—Interim fisheries training (Malakal).

SUD/74/014 — SUDAN — Increase in sesame production.

SUD/75/009—SUDAN—Research and development of wheat and sorghum products for industrial application.

YEM/74/006—YEMEN ARAB REPUBLIC—Establishment of meteorological services (Phase II).

GLO/74/009 — GLOBAL — CIMMYT program for strengthening agricultural economic research in East Africa.

INT/75/006 — INTERREGIONAL — Research on size and management of international commodity stocks.

Future Construction Abroad

KOREA—Korea's **Third Education Project** includes: construction equipment for new technical high school; equipment and enlargement of buildings for three agricultural junior colleges; equipment and enlargement of buildings for a fisheries college, three fisheries high schools and equipment for one merchant marine junior college; construction and equipment for seven new vocational training institutes; and financing of engineering and consultant services for preparation of future educational development projects. Total costs presently est. at $39 million. Foreign exchange cost of $22.5 million will finance construction costs of civil works ($3.5 million), import of equipment ($12.3 million) and employment of foreign engineering and consultant services ($500,000). The government has received preliminary commitment from IBRD for $22.5 million loan. U.S. involvement could include foreign engineering and consultant service and equipment to be purchased. Selection of foreign engineering and consultant services scheduled in late 1975. Procurement will be early 1976. Tendering of contracts for equipment would be responsibility of Office of Supply of Republic of Korea (OSROK). Equipment contracts in packages over $50,000 would be awarded following international competitive bidding in accordance with guidelines for procurement under world bank loans. Packages under $50,000 would be negotiated directly; local suppliers would have 15 percent price preference. Prospective suppliers should contact Mr. Lee, Hae Kyung, Implementing Officer, Educational Facility Bureau, Ministry of Education, Seoul, and should secure adequate sales representation in Korea. OPIC.

NETHERLANDS—Continental Furness, 50-50 joint venture of Continental Grains of New York and Furness N.V. of Rotterdam, have announced construction of **grain storage and transhipment facilities** at Ghent in Belgium. Ghent grain terminal, to be operated by newly-established Ghent Grain Terminal Ltd., will be multifunctional and comprise import & export functions; local distribution; transhipment functions. Investment in terminal will amount to tens of millions of guilders ($1 = 2.44 Dfl.). Investments will include: transportable pneumatic equipment for unloading ships with capacities ranging from 400 to 800 tons grain per hour; conveyer equipment for loading sea vessels, lighters, trucks and trains, and weighing equipment. Interested suppliers contact: Mr. W. Cordia, Grainwave B.V., Maashaven NZ 42, Rotterdam. Tel. 010-858244.

DOMINICAN REPUBLIC—Central project of second phase of expanded water supply system for Santo Domingo will be a **dam on Haina River,** some 25 kilometers northwest of capital. Final design has not been prepared, nor has financing been obtained. Latest official estimate for construction to begin is 1980. Details on dam and greater Santa Domingo water situation and plans can be found in Boyle Engineering Master Plan of Water Resources Development Study of 1972, available at American Embassy, Calle Cesar Nicolas Pensen and Calle, Leopoldo Navarro, APO New York 09899. Responsible government agency is Corporacion Autonoma Del Acueducto de Santo Domingo (CAASD), Frank Pineyro, Director, Jose Contreras, Santo Domingo. OPIC.

HONG KONG—A hugh residential and industrial development project will be developed on 500,000 sq. ft. in Tsuen Wan, New Territories. Estimated cost is U.S. $54 million. Waylee Development and Finance Co., Ltd., developer, plans to carry out construction in two phases: building of 19 residential apartments of 25 stories each, and building 10 factory buildings with total floor area of two million sq. ft. Work expected to start late this year and be completed in five years. Project may open many trade opupourtunities. Interested firms write: Eric Desmond Wood, Director, Waylee Development & Finance Co., Ltd., 403-413 H.K. & Shanghai Bank Bldg., Hong Kong.

BELGIUM—U.S. equipment suppliers may be interested in a $1.5 million **renovation at Anderlecht Slaughterhouse,** largest in Brussels. Modernization should commence late this year and will involve purchase of following major equipment systems: complete pig-slaughtering chain of modest size (150 pigs/hr.); industrial refrigerator for pork, size 600 sq. meters; refrigeration capacity capable of reducing internal ham temperature to 7°c. within 24 hours.; industrial refrigerator for beef, size 21 x 15 x 4.5 meters, or enough for 300 carcasses of 350 kilos ea., capable of reducing internal meat temperature to 10°c. within 24 hrs. Interested suppliers send material and price quotations to Dr. Schyns, Bureau Direction, Abattoir d'Anderlecht Rue Ropsy-Chaudron 43, 1070 Brussels.

ALGERIA—Bids are being accepted by Algerian State Food Industries Monopoly for construction of **two fat treatment stations** (oil works and refineries). Deadline is July 31 for offers, which should be submitted by registered mail to Direction des Realisations, Sogedia, 13 Ave. Claude Debussy, Algiers (Cable Soalco Alger, Telex 52837). Offers must be in French in three copies, with all correspondence in French and all specifications in metric units. Tender documents in French available from above address for 200 Algerian dinars (US $51.66), or may be reviewed with Ms. Cherie Loustaunau, U.S. Dept. of Commerce, Rm. 6015-B, Washington, D.C. 20230. 202-967-4441.

ALGERIA — The Algerian State Railway Corporation is taking bids for prequalification to **double existing railway lines** between Constantine and Ramdane Djamel (67 kilometers), and El Guourzi and El Khroub (21 kilometers), both in eastern Algeria. Offers should be submitted by registered mail by Aug. 15 to Monsieur l'Ingenieur, Chef du Service de la Voie et des Batiments, Bureau Travaux-Marches, SNCFA, 21-23 Blvd. Mohamed V, Algiers (Cable SNCFA Alger, Telex 52851). Offers must be in French. Project, which could begin in 1976, will include 5 million cubic meters of earthworks, three tunnels, rails, line apparatus, cross-bars, signaling, buildings, and stations. French tender documents may be requested in French from above address.

The Overseas Private Investment Corp. (OPIC) offers political risk insurance to U.S. construction firms planning to submit bids on projects in certain developing countries, identified by the "OPIC" notation at the end of some items. For further information on OPIC's construction insurance program, write Information Officer, Overseas Private Investment Corp., Washington, D.C. 20527. Tel: 202-632-1854.

ALGERIA—Bids are being accepted by the Algerian Government to prequalify for study, supply, installation, and startup of one **steam thermal central,** with three or four natural gas units of 160 megawatts each, at Jijel in eastern Algeria. Deadline is July 15 for offers, which should be submitted by registered mail to Direction de l'Equipement Electrique, Department "Moyens de Production Thermiques et Hydrauliques," 6-eme Etage, Nouvel Immeuble, Sonelgaz, 2 Blvd. Salah Bouakouir, Algiers (Cable Sonegdg Alger, Telex 52898). Offers must be in duplicate, include references for similar projects, and cover long-term financing; English is acceptable. Tender documents in French available for review with Ms. Cherie Loustaunau, Rm. 6015-B, U.S. Department of Commerce, Washington, D.C. 20230. 202-967-4441.

EGYPT—Bids are being tendered on a new **plant for manufacture of maize starch in** Turah for the Egyptian Starch and Glucose Manufacturing Co. Offers are due by July 30 and should be submitted to General Organization for Industrialization, 6 Khalil Agha St., Garden City, Cairo. Invitations to bid may be purchased from that organization for 25 pounds sterling.

SYRIA—Tenders are being taken by Syrian Government on **three stations for breeding 1,800 milk cows.** Offers should be submitted by June 21 to General Organization for Livestock, Hama, and should remain valid for 50 days. Completion should be no more than 500 days following contract signing, but preference will be given to offers with shorter completion period. Tender and performance bond is 750,000 Syrian pounds (US $1 equals 3.65 Syrian pounds). A turnkey tender document in Arabic is available upon request from above address.

India's State Trading Corp. Lists Its Import Projections

Following is a breakdown of major commodities (product and value in million rupees, one rupee = U.S.12.5¢) which the State Trading Corp. of India (STC) plans to import during Indian fiscal year 1975-76 (April-March): newsprint, 540.0; palm oil, 430.3; rayon grade wood pulp, 261.3; wool, 179.0; caprolactum, 117.7; rapeseed oil, 102.0; tallow/palm oil, 75.6; sunflower seed oil, 75.0; synthetic rubber, 60.0; dodecyl benzene, 49.0; carbaryl, 44.0; DDT, 43.7; phthalic anhydride, 40.8; titanium dioxide, 26.0; endrine technical, 23.6.

Also, cholorguine diphosphate, 21.5; sisal/Manila hemp, 21.0; bhc technical, 18.0; iodine crude, 17.5; rapeseed, 17.0; vitamin B-6, 16.7; C.A. butyrate, 16.2; sodium cyanide, 15.6; potassium chloride, 15.6; DDT technical, 14.8; C.N. sheets, 13.5; chloramphenicol palmitate, 13.2; chloramphenicol powder, 13.2; tetracycline H.CI., 12.6; L.D. polyethylene, 11.7; ampicillin trihydrate, 11.6; gycerine, 11.2; emthyl dopa, 11.2; N.C. cotton, 10.5; citric acid, 10.5; beta napthol, 10.2; stainless steel, 10.0; others, 247.3; total, 2,650 0.

STC is a large public sector commercial establishment. In recent years, the Government of India's policy has shifted toward increased state trading, and STC has assumed an important import/export role.

☆ U.S. Government Printing Office: 1975, 582-690/24

Commerce Department Directory

Commerce Building, 14th Street and Constitution Avenue, N.W., Washington, D.C. 20230, (202) 783-9200

ROGERS C. B. MORTON, Secretary of Commerce

JOHN K. TABOR, Under Secretary of Commerce

SECRETARIAL OFFICERS

WILMER D. MIZELL, Asst. Secretary for Economic Development

GUY W. CHAMBERLIN, Jr., Acting Asst. Secretary for Administration

JAMES L. PATE, Asst. Secretary for Economic Affairs

BETSY ANCKER-JOHNSON, Asst. Secretary for Science and Technology

ROBERT J. BLACKWELL, Asst. Secretary for Maritime Affairs (Maritime Administration)

DAVID N. PARKER, Acting Asst. Secretary for Tourism (United States Travel Service)

KARL E. BAKKE, General Counsel

TILTON H. DOBBIN, Asst. Secretary for Domestic and International Business

HEADS OF OPERATING UNITS

ROBERT M. WHITE, National Oceanic and Atmospheric Administration

EDWARD D. FAILOR, Social and Economic Statistics Administration

JOSEPH E. CLARK, Acting, National Fire Prevention and Control Administration

ALEX M. ARMENDARIS, Office of Minority Business Enterprise

VINCENT P. BARABBA, Bureau of the Census

GEORGE JASZI, Bureau of Economic Analysis

C. MARSHALL DANN, Patent and Trademark Office

JOHN M. RICHARDSON, Acting, Office of Telecommunications

WILLIAM T. KNOX, National Technical Information Service

RICHARD W. ROBERTS, National Bureau of Standards

Domestic and International Business Administration

ALAN J. POLANSKY, Bureau of Resources and Trade Assistance

CHARLES W. HOSTLER, Bureau of International Commerce

SAMUEL B. SHERWIN, Bureau of Domestic Commerce

ARTHUR T. DOWNEY, Bureau of East-West Trade

LAWRENCE A. FOX, International Economic Policy

JOHN P. KEARNEY, Ombudsman for Business

WILLIAM A. NEWDICK, Acting, Office of Field Operations

DISTRICT OFFICES

ALBUQUERQUE, N.M., 87101, Room 316, U.S. Courthouse (505) 766-2386.

ANCHORAGE, 99501, 632 Sixth Ave., Hill Bldg., Suite 412 (907) 265-4597.

***ATLANTA,** 30309, Suite 523, 1401 Peachtree St., NE. (404) 526-6000.

BALTIMORE, 21202, 415 U.S. Customhouse, Gay and Lombard Sts. (301) 962-3560.

BIRMINGHAM, ALA., 35205, Suite 200-201, 908 S. 20th St. (205) 325-3327.

BOSTON, 02116, 10th Floor, 441 Stuart St. (617) 223-2312.

BUFFALO, N.Y., 14202, Room 1312, Federal Bldg., 111 W. Huron St. (716) 842-3208.

CHARLESTON, W.VA., 25301, 3000 New Federal Office Bldg., 500 Quarrier St. (304) 343-6181, Ext. 375.

CHEYENNE, WYO., 82001, 6022 O'Mahoney Federal Center, 2120 Capitol Ave. (307) 778-2151.

***CHICAGO,** 60603, Room 1406, Mid-Continental Plaza Bldg., 55 E. Monroe St. (312) 353-4450.

CINCINNATI, 45202, 8028 Federal Office Bldg., 550 Main St. (513) 684-2944.

CLEVELAND, 44114, Room 600, 666 Euclid Ave. (216) 522-4750.

COLUMBIA, S.C., 29204, Forest Center, 2611 Forest Dr. (803) 765-5345.

***DALLAS,** 75202, Room 3E7, 1100 Commerce St. (214) 749-1515.

DENVER, 80202, Room 161, New Custom House, 19th and Stout Sts. (303) 837-3246.

DES MOINES, IOWA, 50309, 609 Federal Bldg., 210 Walnut St. (515) 284-4222.

DETROIT, 48226, 445 Federal Bldg. (313) 226-3650.

GREENSBORO, N.C., 27402, 203 Federal Bldg., W. Market St., P.O. Box 1950. (919) 275-9111, Ext. 345.

HARTFORD, CONN., 06103, Room 610-B, Federal Office Bldg., 450 Main St. (203) 244-3530.

HONOLULU, 96813, 286 Alexander Young Bldg., 1015 Bishop St. (808) 546-8694.

HOUSTON, 77002, 201 Fannin, 1017 Federal Office Bldg. (713) 226-4231.

INDIANAPOLIS, 46204, 355 Federal Office Bldg., 46 E. Ohio St. (317) 269-6214.

KANSAS CITY, MO., 64106, Room 1840, 601 E. 12th St. (816) 374-3142.

LOS ANGELES, 90024, 11201 Federal Bldg., 11000 Wilshire Blvd. (213) 824-7591.

MEMPHIS, 38103, Room 710, 147 Jefferson Ave. (901) 534-3213.

MIAMI, 33130, Rm. 821, City National Bank Bldg., 25 W. Flagler St. (305) 350-5267.

MILWAUKEE, 53203, Straus Bldg., 238 W. Wisconsin Ave. (414) 224-3473.

MINNEAPOLIS, 55401, 306 Federal Bldg., 110 S. Fourth St. (612) 725-2133.

NEW ORLEANS, 70130, Room 432, International Trade Mart, 2 Canal St. (504) 589-6546.

* Regional Offices

***NEW YORK,** 10007, 41st Floor, Federal Office Bldg., 26 Federal Plaza, Foley Sq. (212) 264-0634.

NEWARK, N.J., 07102, Gateway Bldg. (4th floor) (201) 645-6214.

***PHILADELPHIA,** 19106, 9448 Federal Bldg., 600 Arch St. (215) 597-2850.

PHOENIX, ARIZ., 85004, 508 Greater Arizona Savings Bldg., 112 N. Central Ave. (602) 261-3285.

PITTSBURGH, 15222, 431 Federal Bldg., 1000 Liberty Ave. (412) 644-2850.

PORTLAND, ORE., 97205, 921 S.W. Washington St., Suite 521, Pittock Block. (503) 221-3001.

RENO, NEV., 89502, 2028 Federal Bldg. 300 Booth St. (702) 784-5203.

RICHMOND, VA., 23240, 8010 Federal Bldg., 400 N. 8th St. (804) 782-2246.

ST. LOUIS, 63105, Chromalloy Bldg., 120 S. Central Ave. (314) 622-4243.

SALT LAKE CITY, 84111, 1201 Federal Bldg., 125 S. State St. (801) 524-5116.

***SAN FRANCISCO,** 94102, Federal Bldg., Box 36013, 450 Golden Gate Ave., (415) 556-5860.

SAN JUAN, P.R., 00902, Room 100, Post Office Bldg. (809) 723-4640.

SAVANNAH, 31402, 235 U.S. Courthouse and Post Office Bldg., 125-29 Bull St. (912) 232-4204.

SEATTLE, 98109, 706 Lake Union Bldg., 1700 Westlake Ave. North (206) 442-5615.

UNITED STATES
GOVERNMENT PRINTING OFFICE
DIVISION OF PUBLIC DOCUMENTS
WASHINGTON, D.C. 20402

OFFICIAL BUSINESS

POSTAGE AND FEES PAID
U.S. GOVERNMENT PRINTING OFFICE
First-Class Mail

U.S.MAIL

GLOBAL MARKET SURVEY
AVIONICS AND AVIATION SUPPORT EQUIPMENT

IMMEDIATE SALES OPPORTUNITIES

FOR MANUFACTURERS of AVIONICS AND AVIATION SUPPORT EQUIPMENT

A new study just published by the Office of International Marketing covering sales opportunities for your products abroad is now available. Contact your nearest District Office (see inside cover) for your free copy.

Right now there's proven, identified demand abroad for the following types of Avionics and Aviation Support Equipment:

AVIONICS, AIRBORNE—

- Communications equipment
- Radar
- Navigation instruments and systems
- Flight instruments
- Meteorological/apparatus
- Avionics test equipment
- Flight simulators

AVIONICS, GROUND-BASED—

- Communications equipment
- Enroute navaids
- Terminal navaids
- Radar
- ATC equipment and systems
- Visual approach and land aids

AVIATION SUPPORT EQUIPMENT—

- Aircraft ground support
- Aircraft repair
- Runway maintenance
- Security systems
- Terminal communications systems
- Passenger transfer systems
- Emergency equipment